

Perceptive Intelligent Capture

Installation and Setup Guide

Version: 5.6.x

Written by: Product Knowledge, R&D
Date: September 2016

perceptivesoftware
from Lexmark

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About Perceptive Intelligent Capture

Perceptive Intelligent Capture is a product suite designed by Perceptive Software, Inc., to process incoming documents automatically. Perceptive Intelligent Capture works with any document that is electronically available including scanned images, faxes, e-mails, and files. Perceptive Intelligent Capture automatically classifies these documents and extracts meaningful information from them.

Within the Perceptive Intelligent Capture suite, Perceptive Intelligent Capture Designer enables you to customize the automatic processing of incoming documents, for example, which document classes are relevant in your enterprise as well as what information to extract from the classified documents. All custom settings are saved in a Perceptive Intelligent Capture project file.

To process large volumes of documents, Perceptive Intelligent Capture organizes documents into batches, which are defined in the Perceptive Intelligent Capture project file. The project files and stored settings are automatically forwarded to Perceptive Intelligent Capture Runtime Server (PIC Runtime Server) for production processing.

PIC Runtime Server runs unattended as a server process in the background. Several mechanisms ensure that the system is stable, meaning that it can automatically recover from most error situations. Multiple instances of PIC Runtime Server can be started simultaneously in a network or on a single machine. These instances cooperate and allow for optimal load distribution.

Batches that cannot be automatically processed in their entirety by PIC Runtime Server are forwarded to the quality assurance application Perceptive Intelligent Capture Verifier (PIC Verifier) for manual correction.

The PIC Verifier is an application module that allows users to verify documents with no software installed on the client side. The Web Verifier application can be used via Internet Explorer on any client machine to verify documents. This requires installation and configuration of the project and batches on the database platform. It is possible to store project and authentication information in the Perceptive Intelligent Capture database. This solution allows for central management of storage and backup and thus provides for easier security, better connectivity of your applications, and higher flexibility of your personnel.

System Requirements

Operating Systems

Using Perceptive Intelligent Capture requires a complete and successful installation of the software on a server or workstation running one of the following operating systems.

- Microsoft Windows Server 2008 R2 (IPv4 and IPv6)
- Microsoft Windows 7
- VMware ESX 5.1 is certified

Perceptive Intelligent Capture Database

The Web Verifier application module requires central management of project data in a database. The Perceptive Intelligent Capture database is certified to run on the following database platforms.

- Microsoft SQL Server 2008 R2
- ORACLE 11g R2

Using Perceptive Intelligent Capture requires .NET Framework 3.5 SP1 installed on the Perceptive Intelligent Capture server or workstation.

IIS

Using Perceptive Intelligent Capture 5.6 requires the following software applications installed on the server.

- Internet Information Server
- .NET Framework 3.5 SP1

For the client browser version side, Internet Explorer 7, 8 and 9 are certified with Perceptive Intelligent Capture 5.6 application.

Scripting components

Perceptive Intelligent Capture is certified for the following supported Scripting component version.

- WinWrap version 9.0.0.56

Hardware Requirements

Before you can implement Perceptive Intelligent Capture, the underlying network must meet certain minimum platform and environment requirements.

This section includes information about, and instructions for, configuring basic network components.

Network Infrastructure

The technology infrastructure underlying Perceptive Intelligent Capture consists of a set of scalable applications and services running on Microsoft Windows operating systems. These applications and services are deployed on a set of high-performance Intel-compatible servers and workstations.

Clients are supported on Intel-compatible workstations running Windows 7.

Perceptive Intelligent Capture is a distributed, two-tier application that is typically deployed across multiple Windows Server operating systems. These applications provide core system services when connected using an unimpeded high-speed, low-latency network infrastructure, such as Fast Ethernet (100BaseTX), using TCP/IP.

Hardware and Software Factors

When implementing a Perceptive Intelligent Capture Project, there are a number of dependencies that influence the hardware requirements for a Perceptive Intelligent Capture solution.

Use the hardware requirements provided in this document as a guideline; it is not a recommended or required hardware configuration for an implementation of Perceptive Intelligent Capture. The actual hardware and software configuration for an installation is based on the client's requirements.

When sizing the hardware for a production environment, consider the following factors.

- **Input volume.** The number of documents and pages to process on a daily basis.
- **Completion Time.** The required amount of time from when the document is scanned into the system to when it is exported out of Perceptive Intelligent Capture.
- **Complexity of input documents.** This includes single or multi-page TIFF, scanned resolution, document size, number of pages OCR'ed per document, and more.
- **Output requirements.** This includes data extraction, validation, and export, number of documents processed per day, and more.
- **Complexity of workflow customization.** This includes, but is not limited to scripting.
- **Third-party software integration requirements.** This includes third-party software such as Oracle Financials, JD Edwards, SAP, CRM systems, and so on.
- **Backup strategy.**
- **Disaster recovery.** This includes backup, fault tolerance, up time, and more.
- **Network operating system platform.**
- **Network environment.**
- **Room for growth.** This includes increased in input and output and other system requirements.
- **Users.** This includes the number of users such as those using Web Verifier versus Verifier.
- **Batch Retention Time.** This is the retention time for a batch of documents to remain in the system after export.
- **Number of projects.** This is the number of Perceptive Intelligent Capture projects per country, per solution, and so on.
- **Components Installed.** Other Perceptive components such as WF-Perceptive Intelligent Capture and Visibility or databases would likely be installed on another server. It is recommended that for a production environment, that you install Perceptive products on separate servers.

The following sections of the document are representations of some hardware scenario configuration.

Hardware Estimate – 500 PPD

Introduction – AP Project

Based on the standard Perceptive AP Project, the following production system is recommended.

- 1-3 page TIFF documents
- Document resolution of 300 dpi
- Average TIFF size of approximately 40KB
- Average WorkDoc size of approximately 21KB
- Minimum data extraction and validation (as per the project)
- Project size of less than 5 MB and less than 10 classes
- Cleanup of exported batches (1-3 days)

Note Disk space requirement is implementation dependent; variables such as document complexity, scanned resolution, and document volume help determine the amount of disk space for a project. For example, persistent storage of TIFF images requires approximately 70 KB per page. In addition, approximately 100 KB per document are required to store WorkDocs with OCR results temporarily. If PDF file generation is enabled, another 100 KB per page are temporarily required.

Hardware Estimate

This table provides the recommended configuration for the systems. The table excludes Web Verifier and database estimates.

Machine Role		Hardware	Software Needed
Perceptive Intelligent Capture Server (Primary) <ul style="list-style-type: none"> • File Repository • OCR/Classify/Extract • Licensing Server 	Required	Dual Core Xeon Class, 2.8 GHz CPU 4 GB RAM 20-40Gb Hard Disk Space Perceptive Licensing Dongle	Windows 2008 R2 with the latest service pack Perceptive Intelligent Capture Version 5.6
Perceptive Intelligent Capture Designer Project Design Class Training	Optional	Pentium IV Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 10 GB hard drive (20 GB hard drive recommended)	Windows 7 Perceptive Intelligent Capture Designer Version 5.6
Perceptive Intelligent Capture Verifier, Advanced Verifier & Learnset Manager Data Verification	Required	Pentium Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 20 GB hard drive (10 GB minimum)	Windows 7 Perceptive Intelligent Capture Verifier Version 5.6
Perceptive Intelligent Capture Remote Admin RTS Remote Administration	Optional	Pentium Class, 2.4 GHz 1 GB RAM [HD – Application install only <500Mb]	Windows 7 Perceptive Intelligent Capture Version 5.6 RTS Remote Admin MMC Snap-in

Hardware Estimate – SQL Server Database (Excl. Web Verifier)

Machine Role		Hardware	Software Needed
Perceptive Intelligent Capture Server (Primary) <ul style="list-style-type: none"> • File Repository • OCR/Classify/Extract • Licensing Server Database Server	Required	Quad Core Xeon Class, 2.8 GHz CPU 4 GB RAM 100Gb Hard Disk Space Perceptive Licensing Dongle	Windows 2008 R2 with the latest service pack SQL Server 2008 R2 or ORACLE 10 and above .NET Framework 3.5 SP1 Perceptive Intelligent Capture Version 5.6
Perceptive Intelligent Capture Designer Project Design Class Training	Optional	Pentium IV Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 10 GB hard drive (20 GB hard drive recommended)	Windows 7 .NET Framework 3.5 SP1 Perceptive Intelligent Capture Designer Version 5.6
Perceptive Intelligent Capture Verifier, Advanced Verifier & Learnset Manager Data Verification	Required	Pentium Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 20 GB hard drive (10 GB minimum)	Windows 7 .NET Framework 3.5 SP1 Perceptive Intelligent Capture Verifier Version 5.6
Perceptive Intelligent Capture Remote Admin RTS Remote Administration	Optional	Pentium Class, 2.4 GHz 1 GB RAM [HD – Application install only <500Mb]	Windows 7 .NET Framework 3.5 SP1 Perceptive Intelligent Capture Version 5.6 RTS Remote Admin MMC Snap-in

Note When using ORACLE as a database, it is advised to have an ORACLE client installed on any workstation/server where Perceptive Intelligent Capture communicates with the database (Designer, Verifier, etc).

Hardware Estimate – Entire Application Suite

The entire application suite is Perceptive Intelligent Capture Runtime Server, Web Server, and Database.

Machine Role		Hardware	Software Needed
Perceptive Intelligent Capture Server (Primary) <ul style="list-style-type: none"> File Repository OCR/Classify/Extract Licensing Server Database Server Web Server	Required	Quad Core Xeon Class, 2.8 GHz CPU 8 GB RAM 100Gb Hard Disk Space Perceptive Licensing Dongle	Windows 2008 R2 with the latest service pack SQL Server 2008 R2 or ORACLE 10 and above Perceptive Intelligent Capture Designer IIS 6 and above .NET Framework 3.5 SP1 Perceptive Intelligent Capture Version 5.6
Perceptive Intelligent Capture Designer Project Design Class Training	Optional	Pentium IV Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 10 GB hard drive (20 GB hard drive recommended)	Windows 7 .NET Framework 3.5 SP1 Perceptive Intelligent Capture Designer Version 5.6
Perceptive Intelligent Capture Verifier, Advanced Verifier & Learnset Manager Data Verification	Optional	Pentium Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 20 GB hard drive (10 GB minimum)	Windows 7 .NET Framework 3.5 SP1 Perceptive Intelligent Capture Verifier Version 5.6
Perceptive Intelligent Capture Web Verifier	Optional	Pentium Class, 2.4 GHz 2GB RAM	Windows 7 Internet Explorer 8
Perceptive Intelligent Capture Remote Admin RTS Remote Administration	Optional	Pentium Class, 2.4 GHz 1 GB RAM [HD – Application install only <500Mb]	Windows 7 .NET Framework 3.5 SP1 Perceptive Intelligent Capture Version 5.6 RTS Remote Admin MMC Snap-in

Hardware Estimate – Typical Development Environment

A typical development environment consists of one server that processes less than 500 pages per day. The specification below should be sufficient to house the Web Server, Database, and Perceptive Intelligent Capture Runtime Server.

Machine Role		Hardware	Software Needed
Perceptive Intelligent Capture Server (Primary) <ul style="list-style-type: none"> • File Repository • OCR/Classify/Extract • Licensing Server • Database Server • Web Server 	Required	Quad Core Xeon Class, 2.8 GHz CPU 8 GB RAM 100Gb Hard Disk Space Perceptive Licensing Dongle	Windows 2008 R2 with the latest service pack SQL Server 2008 R2 or ORACLE 10 and above IIS 6 and above .NET Framework 3.5 SP1 Perceptive Intelligent Capture Designer Perceptive Intelligent Capture Version 5.6

Hardware Estimate – 4000 PPD

Introduction – AP Project

Based on the standard Perceptive AP Project, the following production system is recommended.

Assumptions:

- 1-3 page TIFF documents
- Document resolution of 300 dpi
- Average TIFF size of approximately 60KB
- Average WorkDoc size of approximately 60KB
- Minimum data extraction and validation (as per the project)
- Project size of less than 5 MB and less than 10 classes
- Cleanup of exported batches (1-3 days).
- All documents are provided at the start of the day

Disk space requirement is implementation dependent; variables such as document complexity, scanned resolution, and document volume help determine the amount of disk space for a project. For example, persistent storage of TIFF images requires approximately 70 KB per page. In addition, approximately 100 KB per document are required to store WorkDocs with OCR results temporarily. If PDF file generation is enabled, another 100 KB per page are temporarily required.

Hardware Estimate – File System (Excl. Web Verifier & Database)

Machine Role		Hardware	Software Needed
Perceptive Intelligent Capture Server (Primary) <ul style="list-style-type: none"> • File Repository • OCR/Classify/Extract • Licensing Server 	Required	Quad Core Xeon Class, 2.8 GHz CPU 8GB RAM 200Gb Hard Disk Space Perceptive Licensing Dongle	Windows 2008 R2 with the latest service pack Perceptive Intelligent Capture Version 5.6
Perceptive Intelligent Capture Designer Project Design Class Training	Optional	Pentium IV Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 10 GB hard drive hard drive recommended)	Windows 7 Perceptive Intelligent Capture Designer Version 5.6

Machine Role		Hardware	Software Needed
Perceptive Intelligent Capture Verifier, Advanced Verifier & Learnset Manager Data Verification	Required	Pentium Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 20 GB hard drive (10 GB minimum)	Windows 7 Perceptive Intelligent Capture Verifier Version 5.6
Perceptive Intelligent Capture Remote Admin RTS Remote Administration	Optional	Pentium Class, 2.4 GHz 1 GB RAM [HD – Application install only <500Mb]	Windows 7 Perceptive Intelligent Capture Version 5.6 RTS Remote Admin MMC Snap-in

Hardware Estimate – SQL Server Database (Excl. Web Verifier)

Machine Role		Hardware	Software Needed
Perceptive Intelligent Capture Server (Primary) <ul style="list-style-type: none"> File Repository OCR/Classify/Extract Licensing Server Database Server	Required	Quad Core Xeon Class, 2.8 GHz CPU 8 GB RAM 200Gb Hard Disk Space Perceptive Licensing Dongle	Windows 2008 R2 with the latest service pack SQL Server 2008 R2 or ORACLE 10 and above .NET Framework 3.5 SP1 Perceptive Intelligent Capture Version 5.6
Perceptive Intelligent Capture Designer Project Design Class Training	Optional	Pentium IV Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 10 GB hard drive (20 GB hard drive recommended)	Windows 7 .NET Framework 3.5 SP1 Perceptive Intelligent Capture Designer Version 5.6
Perceptive Intelligent Capture Verifier, Advanced Verifier & Learnset Manager Data Verification	Required	Pentium Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 20 GB hard drive (10 GB minimum)	Windows 7 .NET Framework 3.5 SP1 Perceptive Intelligent Capture Verifier Version 5.6

Machine Role		Hardware	Software Needed
Perceptive Intelligent Capture Remote Admin	Optional	Pentium Class, 2.4 GHz	Windows 7
RTS Remote Administration		1 GB RAM [HD – Application install only <500Mb]	.NET Framework 3.5 SP1 Perceptive Intelligent Capture Version 5.6 RTS Remote Admin MMC Snap-in

When using ORACLE as a database, it is advised to have an ORACLE client installed on any workstation/server where Perceptive Intelligent Capture communicates with the database (Designer, Verifier, etc).

Hardware Estimate – Entire Application Suite

The entire application suite comprises of Perceptive Intelligent Capture Runtime Server, Web Server, and Database.

Machine Role		Hardware	Software Needed
Perceptive Intelligent Capture Server (Primary)	Required	Quad Core Xeon Class, 2.8 GHz CPU	Windows 2008 R2 with the latest service pack
<ul style="list-style-type: none"> File Repository OCR/Classify/Extract Licensing Server Database Server		8 GB RAM 100Gb Hard Disk Space Perceptive Licensing Dongle	SQL Server 2008 R2 or ORACLE 10 and above IIS 6 and above .NET Framework 3.5 SP1 Perceptive Intelligent Capture Version 5.6
Perceptive Intelligent Capture Web Server	Required	Dual Core Xeon Class, 2.8 GHz CPU	Windows 2008 R2 with the latest service pack
		4 GB RAM 50Gb Hard Disk Space 30Gb OS Hard Disk Space	SQL Server 2008 R2 or ORACLE 10 and above Perceptive Intelligent Capture Designer IIS 6 and above .NET Framework 3.5 SP1 Perceptive Intelligent Capture Version 5.6
Perceptive Intelligent Capture Designer	Optional	Pentium IV Class, 2.4 GHz CPU (2.8 GHz recommended)	Windows 7
Project Design Class Training		1 GB RAM 10 GB hard drive (20 GB hard drive recommended)	.NET Framework 3.5 SP1 Perceptive Intelligent Capture Designer Version 5.6

Machine Role		Hardware	Software Needed
Perceptive Intelligent Capture Verifier, Advanced Verifier & Learnset Manager Data Verification	Optional	Pentium Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 20 GB hard drive (10 GB minimum)	Windows 7 .NET Framework 3.5 SP1 Perceptive Intelligent Capture Verifier Version 5.6
Perceptive Intelligent Capture Web Verifier	Optional	Pentium Class, 2.4 GHz 2GB RAM	Windows 7 Internet Explorer 8
Perceptive Intelligent Capture Remote Admin RTS Remote Administration	Optional	Pentium Class, 2.4 GHz 1 GB RAM [HD – Application install only <500Mb]	Windows 7 .NET Framework 3.5 SP1 Perceptive Intelligent Capture Version 5.6 RTS Remote Admin MMC Snap-in

Web Verifier Server Hardware Sizing – Additional Information

Additional Web Server considerations depend on the number of Verifier users.

Number of Users	Memory	Processor
Per User	150Mb	Peak Load 100% of a 3GHz CPU
0-10 Users	4 Gb	Dual Core CPU
11-20 Users	8 Gb	Quad Core CPU

Factors that influence the metrics are listed below.

- Project size and complexity
- Other software stored on the server
- Third party software integration
- Network connections
- Document Sizes
- Project Type

Machine Role	Hardware	Software Needed
Perceptive Intelligent Capture Server (Primary) Project File (.SDP) Batch Directory Stores Images Workdocs Input Directory Learnset License Server	Xeon Class, 2.4 GHz CPU 2 GB RAM Three or more 36 GB (40 GB recommended) + Hot Swappable hard drive RAID Controller (for fault tolerance) Dongle	Windows 2008 R2 with the latest service pack Microsoft .Net Framework 3.5 SP1 Perceptive Intelligent Capture Version 5.6
Perceptive Intelligent Capture RTS Performs OCR Classification Data Extraction Export System Clean-up	Dual Xeon Class, 2.8 GHz CPU 2 GB RAM (1 GB minimum) 40 GB hard drive	Windows 2008 R2 with the latest service pack Microsoft .Net Framework 3.5 SP1 Perceptive Intelligent Capture Version 5.6
Perceptive Intelligent Capture Designer Project Design Class Training	Pentium IV Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 10 GB hard drive (20 GB hard drive recommended)	{xe Windows 7} Windows 7, or Windows 2008 R2 Microsoft .Net Framework 3.5 SP1 Perceptive Intelligent Capture Designer Version 5.6

Machine Role	Hardware	Software Needed
Perceptive Intelligent Capture Verifier, Advanced Verifier & Learnset Manager Data Verification	Pentium Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 20 GB hard drive (10 GB minimum)	{xe Windows 7} Windows 7, or Windows 2008 R2 Microsoft .Net Framework 3.5 SP1 Perceptive Intelligent Capture Verifier Version 5.6
Perceptive Intelligent Capture Remote Admin RTS Remote Administration	Pentium Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 10 GB hard drive	Windows 7, or Windows 2008 R2 Perceptive Intelligent Capture Version 5.6 RTS Remote Admin MMC Snap-in
Perceptive Intelligent Capture Web Verifier Server	Pentium Class, 2.4 GHz CPU (2.8 GHz recommended) 1 GB RAM 10 GB hard drive	{xe Windows 7} Windows 7, or Windows 2008 R2 Microsoft .Net Framework 3.5 SP1 Internet Information Server (IIS) 6.0 or higher Perceptive Intelligent Capture Version 5.6

Infrastructure Constraints

Perceptive Intelligent Capture has been fully tested and is certified to work in most LAN environments. By adhering to the following infrastructure constraints, you can ensure a smooth implementation of the product suite.

OCR Performance

OCR is a processor-intensive task. To maximize OCR performance, we recommend that only one RTS OCR instance is active per CPU on a production server. Although it is possible to run multiple RTS OCR instances on a single CPU, doing so may impair the performance of OCR and the overall system.

Firewalls

Perceptive Intelligent Capture is designed to work in a non-encapsulated LAN environment. A non-encapsulated LAN, in this context, is a LAN segment free of impediments such as firewalls and other traffic-filtering devices.

With multi-site network environments, it is the responsibility of the customer's IT personnel to ensure that an unobstructed communication path exists between the user community and host system.

RTS Remote Administration MMC

You can remotely administer Perceptive Intelligent Capture Runtime Server, meaning that you can centrally manage multiple Runtime Servers from a single workstation on the network using a management console snap-in called the RTS Remote Administration MMC.

However, to use the RTS Remote Administration MMC snap-in, the administrator workstation must either reside on the same LAN segment as the RTS server services to be centrally administered or, in the case of a sub-netted network, a name resolution system must be in place to allow clients on one subnet to locate resources on another subnet.

Remote Administration by MMC requires one free configurable port number. The default port is 50607.

The Windows service Perceptive Intelligent Capture Service Manager must be running to be able to connect by MMC to the Runtime Server service. Once the service is running, it is possible to start and stop each Runtime Server instance separately.

As long as the configured port is available in any TCP/IP network (or Internet across firewalls) and the main service is running, the MMC can be used to configure and maintain the Runtime Server instances.

Installation prerequisites of Perceptive Intelligent Capture

When you are ready to install Perceptive Intelligent Capture, there are several steps you should take to ensure that the installation goes smoothly. This section includes the following information.

- Backward compatibility with other Perceptive applications
- Upgrading from previous versions of Perceptive Intelligent Capture
- Uninstalling Perceptive Intelligent Capture Versions 4.x
- Installing Perceptive Intelligent Capture Version 5.6 in standalone mode
- Installing Perceptive Intelligent Capture Version 5.6
- Checking the installation
- Migrating existing project files to Version 5.6
- Uninstalling Perceptive Intelligent Capture Version 5.6
- Repairing Perceptive Intelligent Capture Version 5.6
- Adding or removing product components

Before Installing Perceptive Intelligent Capture

Before starting the installation, make sure that you have local administrator rights on the target machine. During the installation, a number of DLLs will be copied to the Windows system directory and registered with the operating system. The Perceptive Intelligent Capture database will be created on the SQL Server or ORACLE servers. The install process requires administrative privileges and access to the Windows registry.

The installation media contains the following folders:

- .\Install contains the setup executables of the Perceptive Intelligent Capture product suite.
- .\Install\doc contains Perceptive Intelligent Capture product documentation.

Installation Checklist

The checklist below is designed to help you install and configure Perceptive Intelligent Capture in your environment.

- If you are installing Perceptive Intelligent Capture in standalone mode, such as for a non-network test or demo installation, only complete the steps outlined in **Install Perceptive Intelligent Capture**. You can skip the rest of the installation checklist.
- If you are upgrading from a previous version of Perceptive Intelligent Capture, review and complete the **Upgrade from Previous Versions** section before continuing with the installation checklist.

Upgrade from Previous Versions

- If your organization uses other Perceptive products, read the [Backward Compatibility with Other Perceptive Applications](#) section before proceeding with the installation checklist.
- Read [Hardware Requirements](#).
- Configure the SQL Server / ORACLE software.
- If following the Microsoft recommended resource rights assignment model, create the users and groups.
- Install Perceptive Intelligent Capture version 5.6. ([Install Perceptive Intelligent Capture](#))
- Configure the Runtime Components. ([Configure Runtime Components](#))
- Configure the Runtime Service Manager (Section [Configure the Runtime Service Manager](#)).
- Start the Runtime Service Manager.
- Configure the RTS RemoteAdmin MMC snap-in (Section [Configure the RTS RemoteAdmin MMC Snap-in](#)).
- Test the installation (See the *Perceptive Intelligent Capture Runtime Server User Guide*).
- Configure license and project settings for an instance. (See the *Perceptive Intelligent Capture Runtime Server User's Guide*.)
- Process a batch (minimum workflow steps: OCR, Classification, and Extraction).
- If using Web Verifier, configure the IIS and .NET along with application security. (See [Configure Application](#))

Backward Compatibility with Other Perceptive Applications

Perceptive Intelligent Capture is part of the Perceptive line of application suites branded Perceptive. These products share common components based on the award-winning Perceptive technology.

This version of Perceptive Intelligent Capture is completely based on the Database platform. Support of the file system has been discontinued.

If your organization uses **Capture** (in conjunction with older versions of Perceptive Intelligent Capture) and you want to upgrade to Perceptive Intelligent Capture Version 5.6, you may keep on using the older version of **Capture** on a separate machine and use the RTS image import method. **Capture** is not available in this version of Perceptive Intelligent Capture and cannot be installed/used on the same machine.

Note Perceptive recommends engaging Professional Services to ensure a successful and smooth installation of the software.

Perceptive Intelligent Capture License File

Perceptive Intelligent Capture version 5.6 requires a new license file. Contact Perceptive Customer Support to convert your existing license to a version 5.6 license file.

Perceptive Intelligent Capture Database Checklist

Perceptive Intelligent Capture Database

Perceptive Intelligent Capture version 5.6 is able to store the following Perceptive Intelligent Capture core information directly in the Perceptive Intelligent Capture database, instead of the file system:

- Documents
- Batches (jobs)
- Images and document files in e-format

- Project references
- Users, groups, roles and relationships
- Verifier configuration (Web Verifier only)
- Batch/Document lock handling
- Application level user licensing

File system functionality is no longer supported. Customers with file system based batches that want to upgrade to the new version will be required to upgrade to database based batches.

Prior to installation of Perceptive Intelligent Capture, some care must be taken to make sure that the appropriate configuration steps have been taken.

Perceptive Intelligent Capture SQL Server Checklist

Perceptive Intelligent Capture will need to create the following items prior to the installation of the software:

1. An administrative database account with rights to create, modify, and delete tables. Windows Authentication can be used if the user performing the installation has administrative rights to the database server.
2. A designated user database account which will be used by Perceptive Intelligent Capture to access the database, add, modify, and delete data. Windows Authentication can be used if the user performing the installation has the appropriate rights to the database server.

Perceptive Intelligent Capture ORACLE Checklist

Perceptive Intelligent Capture will need the following items taken care of prior to the installation of the software:

1. Create a new ORACLE instance for Perceptive, give it a name, such as Perceptive Intelligent Capture.
2. Create a new user called Perceptive with a password.
3. Assign sufficient rights to the above user:
 - a. Allow for increased growth of data.
 - b. Allow for insertion, modification, and deletion of data.
 - c. Allow for table, views, etc. creation.
4. Administrative database accounts with rights to create, modify, and delete tables. Windows Authentication can be used if the user performing the installation has administrative rights to the database server.
5. A designated user database account which will be used by Perceptive Intelligent Capture to access the database, add, modify, and delete data. Windows Authentication can be used if the user performing the installation has the appropriate rights to the database server.

Upgrade from Previous Versions

Perceptive Intelligent Capture Versions 1.3.x and 2.x

The earlier versions of Perceptive Intelligent Capture, 1.3.x and 2.x, require Professional Services/Perceptive assistance in upgrading as there have been several changes in the software architecture.

Upgrade from Version 5.3 or later versions

The installation process provides a Repair option to upgrade version 5.3 or later versions to 5.6. For details, refer to the Product Migration Guide.

Upgrade from versions prior to 5.3

Due to the Perceptive Intelligent Capture database focusing from version 5.3 on which has to be established during the setup process, Perceptive Intelligent Capture versions previous to 5.3 must be uninstalled prior to installation of version 5.6.

Remove Perceptive Intelligent Capture Versions 3.0, 4.0, and 4.1

It is recommended to uninstall any previous versions of Perceptive Intelligent Capture prior to installing Perceptive Intelligent Capture 5.6.

The uninstaller may not remove several registry entries and subdirectories adequately. For this reason, they must be removed manually. Follow the procedure below to remove the older version of Perceptive Intelligent Capture before installing Version 5.6.

Important Follow these instructions to remove some of the files and registry entries that are used by other Perceptive products and render the products unusable. If you already have other Perceptive products installed, expand the affected folders and registry keys and delete only the subfolders and sub-registry values that are specific to Perceptive Intelligent Capture.

To remove previous versions of Perceptive Intelligent Capture, complete the following steps.

1. Select **Start > Settings > Control Panel**.
2. Launch the **Add/Remove Program** wizard.
3. On the **Currently Installed Programs** list, select the Perceptive Intelligent Capture version you want to remove.
4. Click **Change/Remove**.
5. Follow the on-screen instructions to remove the product.
6. Click **Finish**.
7. Save any permanent license files in the **...\<Application folder>\Component\Cairo** directory before deleting the **...\<Application folder>** folder.

If there are other Perceptive products installed, do not delete the **...\Cairo** and **...\Cedar** sub-directories or any registry keys specific to those applications. Also, if there are any project files stored below the **...\<Application folder>** folder, you should move them before deleting the folder.

8. Remove the ...**<Application folder>** subdirectory.
9. Restart the machine.
10. Install Perceptive Intelligent Capture Version 5.6.

Note Perceptive Intelligent Capture Runtime Server Settings and Verifier Settings files can be reused in the new version. It is recommended to save these prior to un-installation and reuse them when configuring a new Runtime Server or Verifier Workstation.

Install Perceptive Intelligent Capture

Software Installation

Note You must first install .NET Framework 3.5 SP1 prior to installing Perceptive Intelligent Capture.

To install Perceptive Intelligent Capture, complete the following steps.

1. Browse to the installation folder and run **setup.exe**.
2. English and German are the supported installation languages. The installer gets its language settings from the regional settings of the operating system. The installation defaults to English if a language other than English or German is detected.
3. Make sure that all Perceptive Intelligent Capture applications are closed.
4. Click **Next** to continue.
5. Read and confirm the End-User License Agreement (EULA). You need to agree to the license agreement to proceed with the installation. The EULA file is available in 10 languages. The setup auto-detects your local regional settings and presents the appropriate EULA file. If none of the 10 languages matches your regional settings, the English version is selected by default.
6. Select the installation type: **Complete** or **Custom**
 - **Complete.** Installs the most common options of Perceptive Intelligent Capture Designer, Runtime Server, and Thick/Web Verifier.

OCR Engines FineReader 10, FineReader 11, Kadmos 5, Recognita, QualitySoft, and Cleqs Barcode.

Default Folder. SystemDrive:\Program Files\Perceptive.
Default Program Group. Perceptive Intelligent Capture.
 - **Custom.** It enables you to install only the components you will use.
7. For a complete installation, choose **Complete** and click **Next**. This will run the typical installation and install all optional components. Refer to the **Program Folder and Auto Update** section to complete the setup. By default, the Demo License is included.
8. For a custom installation, choose **Custom** and click **Next**. Read the next chapter for details.

Select Custom Installation

If you selected Custom on the Setup Type screen, you can select the installation directory, the features, and other components.

For a custom installation, complete the following steps.

1. Select the installation directory.
2. In the **Feature Selection** dialog box, select the desired applications.
3. In the **OCR components** list, you can select the optional components used for Barcode recognition and Handprint OCR.
Note Only components selected during the installation are available. For information on adding components after the installation, refer to the [Add or Remove Version 5.6 Components](#) section.
4. Make the selection for the **Demo Project**.
5. Click **Next**.

Note Optional components must be acquired separately and require separate licensing.

Optional components	
Cleqs Barcode Engine:	Reads handwritten and machine-printed data and barcode information. It reads 18 types of barcodes.
FineReader10 OCR Engine:	Supporting Chinese/Korean/Japanese characters in addition to English, German, Italian, French, and Spanish. Converts paper-based or scanned images into editable text.
FineReader11 OCR Engine:	The FineReader11 engine is fully integrated and supports OCR of several additional languages. The FineReader 11 engine features a number of general improvements in the quality of OCR output relative to the FineReader 10 engine: <ul style="list-style-type: none"> • Receipt Mode, • improved auto-orientation, • improved OCR of amounts with leading/trailing asterisks, • improved OCR of amount with leading dollar sign \$.
Kadmos5 OCR Engine:	Used for handwriting recognition.
Recognita Engine:	Supports 75 languages and more than 100 scanner models.
QualitySoft Barcode Engine	Support grayscale and color images. QualitySoft recognizes 19 different barcode types.

Program Folder and Auto Update

For either a typical or a custom installation, complete the following steps.

1. Select the desired applications for the Auto Update Feature. You can enter the path for the Shared Network Updates Directory here.
2. Click **Next**.
3. In the **Select Program Folder** screen, select an existing program folder or a new folder for the Perceptive Intelligent Capture program icons. The default setting is Perceptive\Perceptive Intelligent Capture.
4. Click **Next**.

Finish Typical and Custom Installations

1. Verify that the selected components are listed on the **Selected Install Options** dialog box and click **Next**.
2. At the **WIBU-KEY Runtime-Kit** pop-up window, click **Yes** to install the Runtime-Kit.
3. The setup creates several subdirectories below the installation directory:
 - **\Components\Cairo** contains the Perceptive base components for imaging and recognition. In a complete installation, there are several subdirectories with third party libraries: Accusoft, Cleq Barcode, FineReader, Kadmos, Recognita, and LDF. This directory also contains the master license file.
 - **\Components\Cedar** contains the Perceptive base components for document analysis. There is one subdirectory for each supported language and a subdirectory with a third party library, FindLink.
 - **\Components\Tools** contains the installation log file, component version information, and other tools/utilities for Perceptive Intelligent Capture.
 - **\Projects** contains demo projects.
 - **\Perceptive Intelligent Capture\bin** contains the Perceptive Intelligent Capture Designer executable DstDsr.exe, the Perceptive Intelligent Capture Runtime Server executables DstMgr.exe and DstHost.exe, the Perceptive Intelligent Capture Supervised Learning Manager executable DstSIm.exe, and the Perceptive Intelligent Capture Verifier executable DstVer.exe. It also contains the settings files.
 - **\Perceptive Intelligent Capture\bin\Log** contains the log files of the Perceptive Intelligent Capture Runtime Server.
 - **\Perceptive Intelligent Capture Web Server** contains the Perceptive Intelligent Capture Web components, the Web.Config file, and other web libraries used by the Web Verifier.

If you want to end the installation without installing the Database, go to the **Complete the Perceptive Intelligent Capture Setup** section.

Perceptive Intelligent Capture Database Setup

To complete the database setup, complete the following steps.

1. Select SQL Server or Oracle and click **Next**.
2. Provide administrative login credentials. This will need to be an account, which has access to create databases, tables, views, and so on in the database instance.
3. Enter the name of your Database server. The setup searches for the Database Server, connects with it, and creates a new database on it.
 - SQL Server: DatabaseServerName[\InstanceName]
 - Oracle: DatabaseServerName\InstanceName

Note If you already have a Perceptive Intelligent Capture Database installed, that Database will be overwritten by this installation process. In that case, a notification would be displayed to remind you of deletion:

```
A Perceptive Intelligent Capture Database has been detected.  
If you continue the Database will be overwritten.  
It is strongly recommended that the existing Database be backed up before  
continuing.
```

If you want to save your existing Database, back it up before continuing. This applies for the installation of a new version on the same machine.

If you want to keep your current installation but want to install Perceptive Intelligent Capture, for example on an additional Runtime Server machine, you can keep your existing Database by copying all of the configuration files (web.config and .config files in \Perceptive Intelligent Capture\bin) from the existing installation folder Perceptive Intelligent Capture\bin to the new setup folder.

4. Enter your logon information for the Database or use Windows Authentication. The login credentials need to have Read/Write/Execute access to the newly created Database.
5. Click **Next**.

Complete the Perceptive Intelligent Capture Setup

1. The final part of the installation confirms components that have been installed.
2. Select **Next** to continue.
3. You are presented with a screen to confirm if you want to have desktop icons created for Perceptive Intelligent Capture application. Select the check box if you want desktop icons.
4. Select **Finish** to complete the installation.

Note In version 5.6, the French language is supported for Verifier, Web Verifier, and Learnset Manager. To enable the French language, select the language on the Formats tab of your system's Regional and Language Options.

Manually Create Database Objects (post install)

It is also possible to install the database manually. This can be due to corporate policies. To install and configure the database manually, complete the following steps.

1. Launch Windows Explorer and navigate to the installation folder. Navigate to **<installerFolderLocation>\FirstPart\Database\CreationScripts**. There are two folders, SQL Server and ORACLE. Each folder contains database scripts you execute to create the tables, views, indexes, and default data values.
2. Open the database configuration panel.
 - **SQLServer:** Management Console.
 1. Log into the database with Administrator rights.
 2. Create a new database.
 3. Run the SQL scripts to create the appropriate values.
 - **ORACLE:** SQLPlus or ORACLE Management Console
 1. Follow the steps outlined earlier in this document in configuring the database prior to ORACLE installation. For more information, refer to the **Perceptive Intelligent Capture ORACLE Checklist** section. Log into the database with user account where the tables will be located.
 2. Run the database script to create the appropriate values.
3. Navigate to **<installerFolderLocation>\FirstPart\Database\UpdateScripts**
Again, you will find folders for the SQL and the Oracle scripts.
4. Edit the Update Database script.
 - in Oracle script: TargetDBSchemaName
 - in MS SQL script: TargetDatabaseName

Note If you refrain from executing the steps outlined above, an error message will turn up on running of the Update Scripts.
5. Run the **Update Database** script.
6. Check that the database tables have been created correctly and no errors were reported on execution of the database scripts.
7. There are several configuration components that require modification. Navigate to the Perceptive installation folder. By default this is located in **Program Files\Perceptive**.

8. Navigate to the Perceptive Intelligent Capture Web Server folder and open the **Web.config** file in Notepad.
9. Search for the connection string in the file.

```
<connectionStrings></connectionStrings>
```

10. Modify the connection string to connect to the database.

SQLServer Example

```
<connectionStrings>
<add name="Entities"
connectionString="metadata=res://*/Entity.Entities.csdl|res://*/Entity.Entities.ssd
l|res://*/Entity.Entities.msl; provider=System.Data.SqlClient;provider connection
string=&quot;Data Source=DBINSTANCE\SQLEXPRESS;Initial
Catalog=SQLServerDatabaseCatalog;Integrated Security=false;User
ID=Perceptive;Password=Perceptive;MultipleActiveResultSets=True&quot;;"
providerName="System.Data.EntityClient" />
</connectionStrings>
```

Oracle Example

```
<connectionStrings>
<add name="Entities"
connectionString="metadata=res://*/Entity.ORAEntities.csdl|res://*/Entity.ORAEntiti
es.ssd|res://*/Entity.ORAEntities.msl; provider=EFOracleProvider; Provider
Connection String='Data Source=OracleServerName;User
Id=Perceptive;Password=Perceptive'" providerName="System.Data.EntityClient" />
</connectionStrings>
```

11. Navigate to the \Perceptive Intelligent Capture\bin folder.
12. Repeat the previous steps to update the connection strings in each of the following configuration files.
 - **DstDsr.exe.config**
 - **DstHost.exe.config**
 - **DstSlm.exe.config**
 - **Brainware.System.Project.config**
 - **DstVer.exe.config**
 - **DstWkBrw.exe.config**.

13. For ORACLE installation, it is required to make one more addition to the .NET installation for the ORACLE connection string above to work.

1. Navigate to the Windows folder using Windows Explorer
2. Navigate to **WINDOWS\Microsoft.NET\Framework\ v2.0.50727\CONFIG**.
3. Open the **machine.config** file for editing and location the DbProviderfactories tag.
4. Add the lines below and do not delete any existing data.

```
<system.data>
  <DbProviderFactories>
    <add name="EF Oracle Data Provider" invariant="EFOracleProvider"
description="EF Provider for Oracle testing"
type="EFOracleProvider.EFOracleProviderFactory, EFOracleProvider,
Version=1.0.0.0, Culture=neutral, PublicKeyToken=def642f226e0e59b" />
  </DbProviderFactories>
</system.data>
```

Configure the Perceptive Intelligent Capture database (post install)

After the installation of Perceptive Intelligent Capture with Database there are additional configuration steps that are required.

1. Check the project file names. The project file name will be used to display the available project lists in Web Verifier.
2. Review the list of users in the projects.
 - All usernames and passwords must be consistent throughout all project files.
 - Each user must have their own username and password – user IDs cannot be shared.
3. Export the users from the project file into the Perceptive Intelligent Capture database. This will now make users available to access projects via the Web Verifier.
4. Log into the User table (known in ORACLE as USER_) and for each user, add a Forename and Surname into the Perceptive Intelligent Capture database.
5. Create a Runtime Server instance for the project, or import existing Runtime Server settings, and configure again the Perceptive Intelligent Capture database (creating a job and linking to the Perceptive Intelligent Capture database).

You are now ready to use Perceptive Intelligent Capture with Perceptive Intelligent Capture database.

For information on how to configure a project for a Perceptive Intelligent Capture instance with Perceptive Intelligent Capture database, or to migrate file system batches to the Perceptive Intelligent Capture database, refer to the Perceptive Intelligent Capture Runtime Server User's Guide.

Cedar Workflow History Wrapper Component

Perceptive Intelligent Capture 5.6 introduces an intermediate wrapper component for Workflow History related operations to achieve better compatibility of Visual Studio (VS) 6.

The component *Cedar Workflow History Wrapper* (CdrWH.dll) has to be installed and registered in \Perceptive\Components\Cedar directory.

The component is a COM component created with VS 2008 (V9) C++ and wraps the currently available base component for Workflow History operations, which is the Cedar Database Access component (CdrDB.dll).

To access the Workflow History functionality, the CdrWH.dll should be used instead of the CdrDB.dll.

Install Perceptive Intelligent Capture in a Workgroup Configuration

A Windows Workgroup, also referred to as Peer-to-Peer networking, is a network implementation of Windows-based operating systems (clients and servers) in which there is no central security authority (domain controller) responsible for user authentication or a central repository (such as Active Directory) for locating network resources.

In such a network, each machine is responsible for securing its resources, and users needing access to a resource located on a machine must have an account defined on that machine. Windows Workgroup networking should only be used when you want to set up communication between a limited number of computers (less than 10) and the machines are not members of a Windows domain.

For an implementation of Perceptive Intelligent Capture in corporate network environments that are standardized on network operating systems (servers) other than Windows – Novell Netware – a Windows Workgroup setup may be the only choice. To install Perceptive Intelligent Capture in Windows Workgroup, log on as an administrator and complete the following steps.

1. Create a user with the same name on each Perceptive Intelligent Capture machine. Perceptive recommends Perceptive Intelligent Capture RTSSvc as the user name. (This does not apply to machines that will be used only as a Designer or Verifier workstation.)
2. Add the above user to the local Administrators group on each Perceptive Intelligent Capture server.
3. Install Perceptive Intelligent Capture on each machine by following the steps in section **Software Installation**.
4. Configure and start the Runtime Service Manager by performing the steps in section **Configure the Runtime Service Manager** on each machine, with the following exception: Wherever a domain user is requested, add the user created in step 1 above.
5. Configure the RTS Remote Administration MMC snap-in by performing the steps in section **Configure the RTS RemoteAdmin MMC Snap-in** on each machine.
6. Configure project settings on each machine and test the instance created in Step 5 above. You should (at a minimum) test the OCR, Classification, and Extraction workflow steps. For more information on how to configure project settings for a Perceptive Intelligent Capture RTS instance, see the *Perceptive Intelligent Capture Runtime Server User's Guide*.
7. Once you have successfully tested each machine, test remote communication by adding a remote machine to the local MMC snap-in of one your servers. You can accomplish this by performing a subset of the steps (Steps 4 through 7) in section **Configure the RTS RemoteAdmin MMC Snap-in**.
8. You should be able to administer the RTS instances (start, stop, change batch states, etc.) of the remote machine from the MMC snap-in of the local machine on which it was added.

Install Perceptive Intelligent Capture in Standalone Mode

Perceptive Intelligent Capture can be deployed in a standalone mode. However, this implementation method is intended for test and demonstration purposes only. It should NOT be used in a production environment. Deployment of Perceptive Intelligent Capture in Standalone mode for production purposes would be deemed unsupported by Perceptive.

In this setup, all Perceptive Intelligent Capture components (applications, RTS, Remote Admin MMC snap-in, etc.) are installed and intended to be used on a single machine. Additionally, the integrated machine is not part of a Windows domain or is not intended to communicate with Perceptive Intelligent Capture RTS instances running on other machine(s) in a network environment.

Using this setup, almost all of the configuration constraints (Windows domain, Users and Groups, etc.) can be ignored.

To install Perceptive Intelligent Capture in a standalone mode, complete the following steps.

1. Attach your supplied hardware key (serial or USB dongle) to the machine.
2. Install Perceptive Intelligent Capture Version 5.6 by following the steps in section **Install Perceptive Intelligent Capture in a Workgroup Configuration**.
3. Replace the demo license file, zCroDemo.lic, located in the ...\\Perceptive\\Components\\Cairo folder, with a valid license file corresponding to the serial number of your supplied hardware key. Perceptive Intelligent Capture license file names are usually in the format *_xxxxxxx.lic: where * can be any number of alphanumeric characters and xxxxxxx is an eight-digit number representing the serial number printed on the corresponding dongle.
4. Configure the RTS Remote Administration MMC snap-in by following the steps in section **Configure the RTS RemoteAdmin MMC Snap-in** with one exception: In Step 6 of the procedure outlined, type LocalHost instead of the server name.
5. Configure project settings and test the instance created in step 4 above. You should (at a minimum) test the OCR, Classification, and Extraction workflow steps. For more information on how to configure project settings for a Perceptive Intelligent Capture RTS instance, see the *Perceptive Intelligent Capture Runtime Server User's Guide*.

Check the Installation

The installation was successful if Perceptive Intelligent Capture runs without errors.

To check for the correct installation of components, complete the following steps.

1. Open the installation directory.
2. Open `\Components\Tools`.
3. Run `SCBLibVersion.exe`.
4. From the menu, select *View>Components General Info*. This displays a list of installed components:
5. Check the list for
 - Completeness of components
 - Homogeneity of build numbers
 - Installation paths
6. All components `Cro*.dll`, `Cdr*.dll` and `Bwe*.dll` should have been registered automatically during the installation. If some of them seem to be missing, try to register them manually via the `RegCro.bat`, `RegCdr.bat` and `BweReg.bat` Windows batch files available in `.\Components\Cairo`, `.\Components\Cedar` and the corresponding `.\Components\Bwe` directories.

If the automatic registration does not work, try to register manually using the program `regsvr32.exe` from the Windows system directory.

If this does not help, create a copy of the components list using the command *File>Save* to file in the Perceptive Component Version Info dialog box. Submit an error report, the components list, and the log files located in the `...\Perceptive\Perceptive Intelligent Capture\bin\Log` folder to Perceptive Customer Support.

Migrate Existing Project Files to Version 5.6

After you remove the earlier version of Perceptive Intelligent Capture and install Version 5.6, project files designed in the earlier version must be converted to Version 5.6 formats before they can be used in the new version.

The conversion process is fully automated and is done by Perceptive Intelligent Capture Designer. To convert project files created with earlier versions of Perceptive Intelligent Capture to Version 5.6, complete the following steps.

1. Launch Perceptive Intelligent Capture Designer.
2. On the **Load Project** dialog box, browse to the project file location and double-click the project file that you want to convert. Log in to the project using **Administrator** for **User ID** with the corresponding password.
3. Click **OK** to launch the automatic project conversion process. The conversion takes from a few seconds to a few minutes, depending on the size of the project.
4. Once the conversion is completed, click **Learn** (Light bulb) to relearn the project.
5. Save the project. The project is ready for use in Perceptive Intelligent Capture Version 5.6.

Important You should always take a backup of the project and the Learnset.

For information on how to configure a project for a Perceptive Intelligent Capture database, refer to the *Perceptive Intelligent Capture Designer User's Guide*.

Remove Perceptive Intelligent Capture Version 5.6

Perceptive Intelligent Capture can be uninstalled by using the Windows Control Panel's *Add/ Remove* functionality. It is important to stop all running services using the Task Manager before uninstalling the application. To remove previous versions of Perceptive Intelligent Capture, complete the following steps.

1. Click **Start > Settings > Control Panel**.
2. Launch the **Add/Remove Program** wizard.
3. On the **Currently Installed Programs** list, select Perceptive Intelligent Capture V5.6.
4. Click *Remove*.
5. Follow the on-screen instructions.
6. After un-installation, reboot your computer.

Repair a Perceptive Intelligent Capture Version 5.6 Installation

The Perceptive Intelligent Capture installer may be used to repair a copy of Perceptive Intelligent Capture that has stopped working properly. The following factors could cause an installation to malfunction.

- Accidental deletion of application files
- Missing registry entries
- Corrupted application files
- Malicious attacks on a machine housing Perceptive Intelligent Capture

To repair Perceptive Intelligent Capture, complete the following steps.

1. Select **Start > Settings > Control Panel**.
2. Select **Add/Remove Program**.
3. In the **Currently Installed Programs** list on the **Add/Remove Programs** dialog box, select **Perceptive Intelligent Capture v5.6**.
4. Click **Change**.
5. Read and confirm the end-user license agreement. You need to agree to the end-user license to proceed with the repair step.
6. On the **Setup** dialog box, select **Repair** and then click **Next**. This process reinstalls all program components that were installed by the previous setup.
7. Click **Finish** when setup is completed.

Add or Remove Version 5.6 Components

Perceptive Intelligent Capture is a product suite consisting of the following applications.

- Perceptive Intelligent Capture Runtime Server
- Perceptive Intelligent Capture Designer
- Perceptive Intelligent Capture Verifier
- Perceptive Intelligent Capture Web Verifier

The Perceptive Intelligent Capture deployment utility, Setup.exe, uses a modular approach that enables you to add or remove applications from a machine.

To modify an existing Perceptive Intelligent Capture installation, complete the following steps.

1. Select **Start > Settings > Control Panel**.
2. Select **Add/Remove Program**.
3. In the **Currently Installed Programs** list, select **Perceptive Intelligent Capture V 5.6**.
4. Click **Change**.
5. Read and confirm the end-user license agreement. You need to agree to the end-user license to proceed with the repair step.
6. On the **Setup** dialog box, select **Modify** and click **Next**.
7. In the **Select Components** dialog box, select or clear the desired components.
8. Click **Next**. Setup adds (if checked) or removes (if unchecked) the components.
9. Click **Finish** when setup completes.

Install Perceptive Intelligent Capture Service Packs and Service Updates

Interim updates, minor enhancements, and defect corrections for Perceptive Intelligent Capture are typically released as a service pack. Service Packs for Perceptive Intelligent Capture are self-extracting executables. Perceptive distributes them in a number of ways, including e-mail and product CDs.

A Release Notes document detailing the product issues addressed and deployment instructions specific to that service pack accompanies each Service Pack release.

Current patch level

To check for the current version of the combined patch you are using, complete the following steps.

1. Check the file version for the **Brainware.Verifier.WebClient.dll** in the **\Perceptive Intelligent Capture\bin** directory.
2. Check the highest file version of the **Cdr*.dll** in the **\Components\Cedar** and **"Dst*.dll/exe** file in the **\Perceptive Intelligent Capture\bin**.

Password Encryption for Database Connection Strings in Core Config Files

The application architecture of Perceptive Intelligent Capture makes it very important to be able to hide sensitive security information, such as DB access password, stored in Perceptive Intelligent Capture or custom project configuration files.

Password encryption is optional and former configuration files with unencrypted passwords will still work with no issues.

Note Maximum number of characters allowed to encrypt is 30. Passwords longer than 30 characters are not encrypted.

To encrypt the database connection password for the core Perceptive Intelligent Capture CONFIG files, complete the following steps.

1. Open one of the Perceptive Intelligent Capture config files you use, for example **.\Application\bin\DstDsr.exe.config** in a text editor.
2. Locate the connection string and the password part of the string as shown in the following example.

```
<connectionStrings>
    <add name="Entities"
connectionString="metadata=res://*/Entity.Entities.csdl|res://*/Entity.Entities.ssd
l|res://*/Entity.Entities.msl;provider=System.Data.SqlClient;provider connection
string=&quot;Data Source=MYSQLSRV;Initial Catalog=DatabaseName;Integrated
Security=false;User ID=alexey;
Password=MyPassword;MultipleActiveResultSets=True&quot;; "
providerName="System.Data.EntityClient" />
</connectionStrings>
```

3. Modify the password, replacing it with any amount of star signs, as shown in the following example.

```
<connectionStrings>
    <add name="Entities"
connectionString="metadata=res://*/Entity.Entities.csdl|res://*/Entity.Entities.ssd
l|res://*/Entity.Entities.msl;provider=System.Data.SqlClient;provider connection
string=&quot;Data Source=MYSQLSRV;Initial Catalog=DatabaseName;Integrated
Security=false;User ID=alexey;
Password=*****;MultipleActiveResultSets=True&quot;; "
providerName="System.Data.EntityClient" />
</connectionStrings>
```

Note The number of * is not important.

4. Run the **.\Perceptive\Perceptive Intelligent Capture\bin\DstCrypt.exe** tool using the following arguments.
 - DstCrypt.exe /text MyPassword >> my_encrypted_password.txt
 - Optional. You can add the line above to a new BAT file created in the Perceptive\Perceptive Intelligent Capture\bin\ directory and double-click it. This should produce a new file with the name my_encrypted_password.txt in the same directory where the executable is located.
5. Open the resulting text file, which will contain text similar to the following example. Copy the information in red that represents the encrypted password.

```
Text MyPassword encoded to
Y652CeXVdMtdNtbnBD2itCEmFFyHf9IGsN2psi6svy/MsKp8nKUgv2P7M37uu5rNo3V7wkH5795A5z6WG
ox/KEm60l6AG9flX+B5miOQg7iOgJCBqoHrsAbICHzm2EJbCkaMp1oUcvtP+8hpeJVMlBpD+QkfLlithUX
INhWaCM=
```

6. Locate the **appSettings** section of your **DstDsr.exe.config** file and add the new **EncrPwd** key to this section, assigning the red encrypted sequence above to the value of the key as shown in the following example.

```
<appSettings>
    <add key="EncrPwd"
value="Y652CeXVdMtdNtbnBD2itCEmFFyHf9IGsN2psi6svy/MsKp8nKUgv2P7M37uu5rNo3V7wkH5795
A5z6WGox/KEm60l6AG9flX+B5miOQg7iOgJCBqoHrsAbICHzm2EJbCkaMp1oUcvtP+8hpeJVMlBpD+QkfLl
ithUXINhWaCM=" />
</appSettings>
```

7. Save your **DstDsr.exe.config** file.
8. When required, apply the previous steps to the other core configuration files that represent different applications. These applications are listed below.
 - For Runtime Server application: `.\Application\bin\DstHost.exe.config`
 - For Learnset Manager tool: `.\Application\bin\DstSIm.exe.config`
 - For Designer application: `.\Application\bin\DstDsr.exe.config`
 - For Thick Verifier application: `.\Application\bin\DstVer.exe.config`
 - For Supervised Learning nomination feature of Web Verifier application: `.\Application\bin\Brainware.System.Project.exe.config`
 - For Web Verifier application: `.\Application Web Server\web.config`

Note Corrupted or incorrect encryption key or an incorrect password in the **web.config** file entails a **Login failed** error message when trying to open the Web Verifier application.

INI File Encryption

Perceptive Intelligent Capture allows the user to encrypt a password within the open text INI file. For example, for database connections (Reporting, PO Lookup), SAP connections (Export), etc. RSA encryption is used which contains a public key and a private key.

Public Key: provides customer or PS integrated, for user who wants to encrypt text in INI file. It is distributed to PS teams and customer service for generating an encrypted passwords.

Example:

```
<RSAKeyValue><Modulus>vJ+W7SuXuvOrWVoy4tPrbflCuoHElo750cpTuEzLPk6iz6bHAodPVgLFaOEK+XMMS2G5z+6961v
uQsDGUt+01Ag1PiTXCa6rrAaeCaaDO4HI8Mmpw0OkUZEFcZpTTYCYQPfZlgokwomF6VDSB9dlUS430IT0gctQY1b5iM4MqT0=
</Modulus><Exponent>AQAB</Exponent></RSAKeyValue>
```

Private Key: held by project owner/ developer only.

Example:

```
<RSAKeyValue><Modulus>vJ+W7SuXuvOrWVoy4tPrbflCuoHElo750cpTuEzLPk6iz6bHAodPVgLFaOEK+XMMS2G5z+6961v
uQsDGUt+01Ag1PiTXCa6rrAaeCaaDO4HI8Mmpw0OkUZEFcZpTTYCYQPfZlgokwomF6VDSB9dlUS430IT0gctQY1b5iM4MqT0=
</Modulus><Exponent>AQAB</Exponent><P>8SRHEvT5Bn2parHSDR9yCQb7WGYE9PbeHzuqwh6iWa0LNYJrSrhhUeCEPwl
PLQWQq10KmMZgG0+Br4nuBMmMHQ==</P><Q>yD719fjB/MJWYaV3LcEzY286Q+Xvo74i6THvHkKqB1NKYGcN9xF9d8XbiUQNg
BZ/4F02T6mFeYDO32KFVRXHoQ==</Q><DP>nRDTFn7nwRmSgfrwi8minkyk5DQ3IFO35EIZ+x3Ao4Z52ZWkStwDz6/c12vR3X
JVg7irkU0NB1zoDK1bklSw5Q==</DP><DQ>B3xieGmORva05/2ZkPpSA3ubAALQjJ6FC5a0S7tOQ+vXMfdoTD45JIsfA+ipYI
p2yVpyt10tc7FHBA7Y0S95QQ==</DQ><InverseQ>4S1xqlXK9f1rawGCbFwOVp6lz1fCoQ8RfyDE87/G/pUilHRJV2acBacn
gY3c/MRMKrXQb8lx99k7dENUYc8ywQ==</InverseQ><D>KAL6cwkCQKgbuvKFRNSLZmFOqV2JpB5kI/p1U+0GWA6Qi4wnPq
y+5303na0a2faPctXLSKJqvlvSz21VDMUCsyphvOSxBtc1cZHJp4ueQPA7u+qrIJADY1RhLAVoqNfCJFX6+McVJ+I/X+mZOCt
dUaCuAoNn014UYOaMuJYDQE
```

```
=</D></RSAKeyValue>
```

Below is the new connection string parameter:

```
SQL_VL_01_ConnectionString=Provider=SQLOLEDB.1;Persist Security Info=True;User ID=sa;Initial
Catalog=MyData;Data Source=10.4.0.19
SQL_VL_01_ConnectionPassword=MyEncryptedPassword
```

INI File Encryption for Project Developer

The idea of coding is to locate the code that calls Database Connection from the INI file, so that you can read the new line in the INI file with an encrypted line text. The password then can be decrypted by using a Private Key. At last, you append the password to the end of the Connection String in the INI file.

As a project developer, you can select the CdrCrypt ScriptModule in the Reference section of Project File Script Page.

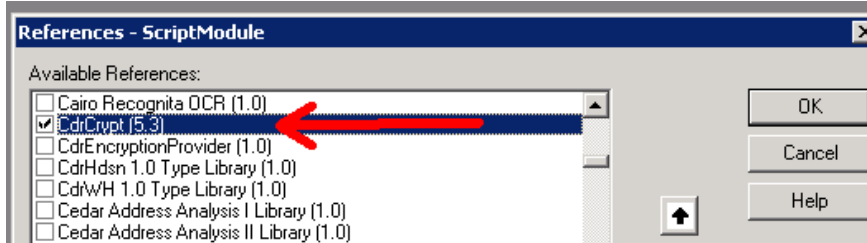


Figure 1: Script Module References

Note Additional security can be provided by Encrypting Script Page.

Example script of the encrypted password:

```
Dim theCedarCryptographyHelper As New CdrCrypt.RSACodecInt
Dim strEncryptedPassword As String
Dim strOpenPassword As String
Dim strPrivateKey As String

strPrivateKey =
"<RSAKeyValue><Modulus>vJ+W7SuXuvOrWVoy4tPrbflCuoHElo750cpTuEzLpK6iz6bHAodPVgLFaOEK+XM
MS2G5z+6961vuQsDGUt+O1Ag1PiTXCa6rrAaeCaaDO4HI8Mmpw0OkUZefCZpTTYCYQPfZlgokwomF6VDSB9dlU
S430IT0gctQY1b5iM4MqT0=</Modulus><Exponent>AQAB</Exponent><P>8SRHEvT5Bn2paRHSDR9yCQb7W
GYE9PbeHzuqwh6iWa0LNYJrSrhUeCEpwlPLQWQq10KmMZgG0+Br4nuBMmMHQ==</P><Q>yD7l9fjB/MJWYaV3
LcEzY286Q+Xvo74i6THvHkKqB1NKYGcN9xF9d8XbiUQNGBZ/4F02T6mFeYDO32KFVRXHoQ==</Q><DP>nRDTFn
7nwRmSgfrwi8minkyk5DQ3IF035EIZ+x3Ao4Z52ZWkStwDz6/c12vR3XJVg7irkUONBlzoDKlBk1Sw5Q==</DP
><DQ>B3xieGmORva05/2ZkPpSA3ubAALOjJ6FC5a0S7tOQ+vXMfdoTD45JIsfA+ipYIp2yVpyt10tC7fHBA7Y0
S95QQ==</DQ><InverseQ>4S1xqlXK9f1rawGCbFWOVp6lzl1fCoQ8RfyDE87/G/pUilHRJV2acBAcngY3c/MRM
KrXQb8lx99k7dENUYc8ywQ==</InverseQ><D>KAL6cwkCQKgbuvKFRNSLZmFOqV2JpB5ki/plU+0GWAs6Qi4w
nPqy+5303naOa2faPctXLSKJqvlvSz21VDMUCsyphvOSxBtc1cZHJp4ueQPA7u+qrIJJaDYlRh1AVoqNfCJFX6+
McVJ+I/X+mZOcTdUaCuAoNn014UYOaMuJYDQE=</D></RSAKeyValue>"

strEncryptedPassword = DicVal("01" & "ConnectionPassword", "SQL")

If Len(strEncryptedPassword) > 0 Then
    strOpenPassword = theCedarCryptographyHelper.Decode(strEncryptedPassword,
strPrivateKey)
End If

If Len(strOpenPassword) > 0 Then
    strConnection = strConnection + ";Password=" + strOpenPassword
End If
```


INI File Encryption for Integrator

As an integrator, you simply need to add the encrypted customer password, and encrypt the password similarly to Config files.

Run the following command in the Perceptive\Perceptive Intelligent Capture\bin folder:

```
DstCrypt.exe /text "MyPassword" /key
"<RSAKeyValue><Modulus>vJ+W7SuXuvOrWVoy4tPrbflCuoHElo750cpTuEzLPk6iz6bHAodPVgLFaOEk+XM
MS2G5z+6961vuQsDGUt+01Ag1PiTXCa6rrAaeCaaDO4HI8Mmpw00kUZefCZpTTYCYQPfZlgokwomF6VDSB9dlU
S430IT0gctQY1b5iM4MqT0=</Modulus><Exponent>AQAB</Exponent></RSAKeyValue>" >>
my_encrypted_custom_password.txt
```

The `my_encrypted_custom_password.txt` will now contain the encrypted text string for the password.

And then, add the encrypted password to the ConnectionPassword INI tag.

```
SQL_VL_01_ConnectionPassword=puejB5SQNCFGgwe6MRoWc1Gly7qX8xSAhgUZjhN6JolhYdKlXla7vLMU4
bYmG9V3Ayxualp/ObgXRqnSAmGsGF1FPZXXktRmf58SXbnCDXmYrYgp8eS3IaqiLUPrhTiRCvfr8ZsMtK+3usma
hfxpESUOQ7Mzf36suWV4V3sBf9Xw=
```

Silent Installations

A Silent Install mode is provided for situations where the same configuration of Perceptive Intelligent Capture is to be installed on several machines, for example, Verifier workstations. The use of a configuration file removes the necessity to go through the installation dialog on each machine.

Silent Install.ini

The configuration settings for the silent installation are read from the "Silent Install.ini" file in the Perceptive Intelligent Capture installation directory. The directory contains an example file which must be edited before performing a silent installation.

The file contains seven sections – General, Applications, OCR Engines, Additional, AutoServiceUpdate, Database Configuration, and DB Credentials.

It's allowed to delete single entries or complete sections.

However, it's not allowed to use options without the section name. If any information is deleted from the "Silent Install.ini" file, the Setup uses the DEFAULT values as described.

Name	Description
[General]	Determines how and where Perceptive Intelligent Capture is to be installed.
Path =	Indicates where the application should be installed. The pathname should not have a final backslash. Example: Path = C:\Program Files\your company name.
EULA =	The end-user agreement needs to be accepted on each machine where the software is installed. If this section is not modified in the silent install.ini file, the silent installation would be canceled. 0: Accepted 1: Not accepted

Name	Description
MoveComponentsIfRequired =	<p>If an older version of the application is installed, this indicates whether to use the existing component folder or whether to move the old components into the new directory prior to installation.</p> <p>0: Use existing component folder. 1: Move components to the new path.</p>
CreateDeskTopIcons =	<p>0: Don't create desktop shortcuts. 1: Create desktop shortcuts.</p>
InstallWibuKey =	<p>0: Skip Wibukey driver installation. 1: Install Wibukey drivers.</p>
StopIfDotNetIsNotFound = #	<p>0: If .Net Framework 3.5 SP1 is not found on the system the installation proceeds. The Features (WebVerifier, Database Connection...) will not be installed. 1 (DEFAULT): If .Net Framework 3.5 SP1 is not found on the system the installation will be aborted.</p>
[Applications]	<p>Defines which applications are to be installed. Note that it is permissible to skip all applications if, for example, only the extraction components are to be installed.</p>
Designer =	<p>0: Skip installation of the Designer application. 1: Install the Designer application.</p>
Verifier =	<p>0: Skip installation of the Verifier application. 1: Install the Verifier application.</p>
Runtime Service =	<p>0: Skip installation of the Runtime Server application. 1: Install the Runtime Server application.</p>
Web Verifier=	<p>0: To skip installation of WebVerifier application (Thin Client) 1 (DEFAULT): Install WebVerifier application (Refer to option StopIfDotNetIsNotFound)</p>
[OCR Engines]	<p>Defines which OCR engines are to be installed. It is permissible to skip all the engines.</p>
FineReader10 =	<p>0: Skip installation of ABBYY FineReader 10. 1: Install ABBYY FineReader 10.</p>
FineReader11 =	<p>0: Skip installation of ABBYY FineReader 11. 1: Install ABBYY FineReader 11.</p>

Name	Description
Kadmos5 =	0: Skip installation of Kadmos 5 engine. 1: Install Kadmos 5 engine.
Recognita =	0: Skip installation of Recognita engine. 1: Install Recognita engine.
QualitySoft	0: Skip installation of QualitySoft engine. 1: Install QualitySoft engine.
Cleqs =	0: Skip installation of Cleqs engine. 1: Install Cleqs engine.
[Additional]	Additional files to install.
Demo Files =	0: Skip installation of the demo project files. 1: Install demo project files.
[AutoServiceUpdate]	Defines the installation of automatic ServiceUpdate (will be skipped if ForDesigner and ForVerifier are skipped)
ForDesigner =	0 (DEFAULT): Skip definition of ServiceUpdate for Designer Application. 1: Defines Shortcut for Designer start with automatic ServiceUpdate
ForVerifier = #	0 (DEFAULT): Skip definition of ServiceUpdate for Verifier Application. 1: Defines Shortcut for Verifier start with automatic ServiceUpdate.
NetworkUpdateFolder = ""	Path where automatic ServiceUpdate looks for Updates. (DEFAULT empty string)
[Database Configuration]	Configures Existing DatabaseServer (Refer to option StopIfDotNetIsNotFound).
DBServerType = #	1: SQL Server database will be configured. 2: Oracle Server database will be configured. 3 (DEFAULT): No database will be configured.
If there is any wrong information for the following options DBServerType will be set to 3	
UseDBConflniFile = ""	Text file name that contains Database Connection String. If this option is empty, credentials will be taken from [DB Credentials] section. If there is neither a config file nor a [DB Credentials] section, DBServerType will be set to 3 (no database) internally. (DEFAULT empty string).

Name	Description
[DB Credentials]	This section can be used instead of a config file (See Option UseDBConfIniFile). (DEFAULT database cofiguration will be skipped, if option UseDBConfIniFile is not set).
Only for SQL Server Usage (See Option DBServerType and UseDBConfIniFile)	
SQLServerWindowsAuthent =	0 (DEFAULT): No Windows Authentication will be used for DBA. 1: Windows Authentication will be used for DBA.
SQSqlserverAdminUser = ""	DBA account name (Refer tooption SQLServerWindowsAuthent) (DEFAULT empty string).
SQLServerAdminPassword = ""	DBA account password (Refer tooption SQLServerWindowsAuthent) (DEFAULT empty string).
For both Database Server Types (See Option DBServerType and UseDBConfIniFile)	
DBUserWindowsAuthent = #	0 (DEFAULT): No Windows Authentication will be used for DB user. 1: Windows Authentication will be used for DB user.
DBUserName = ""	DB user account name (Refer tooption DBUserWindowsAuthent) (DEFAULT empty string).
DBUserPassword = ""	DB user account password (Refer tooption DBUserWindowsAuthent) (DEFAULT empty string).
DatabaseServerPath = ""	Name of the database. Ususal it is build like <MachineName>\<InstanceName> (DEFAULT empty string).

An example "Silent Install.ini" INI-file is available in the root setup directory.

Prepare Internet Information Server (post install)

One of the preconditions for working with Perceptive Intelligent Capture Web Verifier is the installation of the Internet Information Server. Windows 2003 Server works with IIS 6.0, Windows 2008 Server with IIS 7.0.

Perform the installation of the appropriate IIS application version. Use the following links for more information.

- For Windows 2003 Server and IIS 6.0
<http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/750d3137-462c-491d-b6c7-5f370d7f26cd.mspx?mfr=true>
- For Windows Server 2008 or Windows Server 2008 R2 and IIS 7.0/IIS 7.5
<http://learn.iis.net/page.aspx/29/installing-iis-7-on-windows-server-2008-or-windows-server-2008-r2/>

Configure IIS 6.0

The Internet Information Server is used for executing the Perceptive Intelligent Capture Web-Verifier. The IIS configuration is presented below.

1. Run IIS manager (**Start > Control Panel > Administrative tools – Internet Information Services**).
2. Extend **Web Sites**.
3. Right-click the **Default Web Site** node, then choose **New > Virtual Directory**.

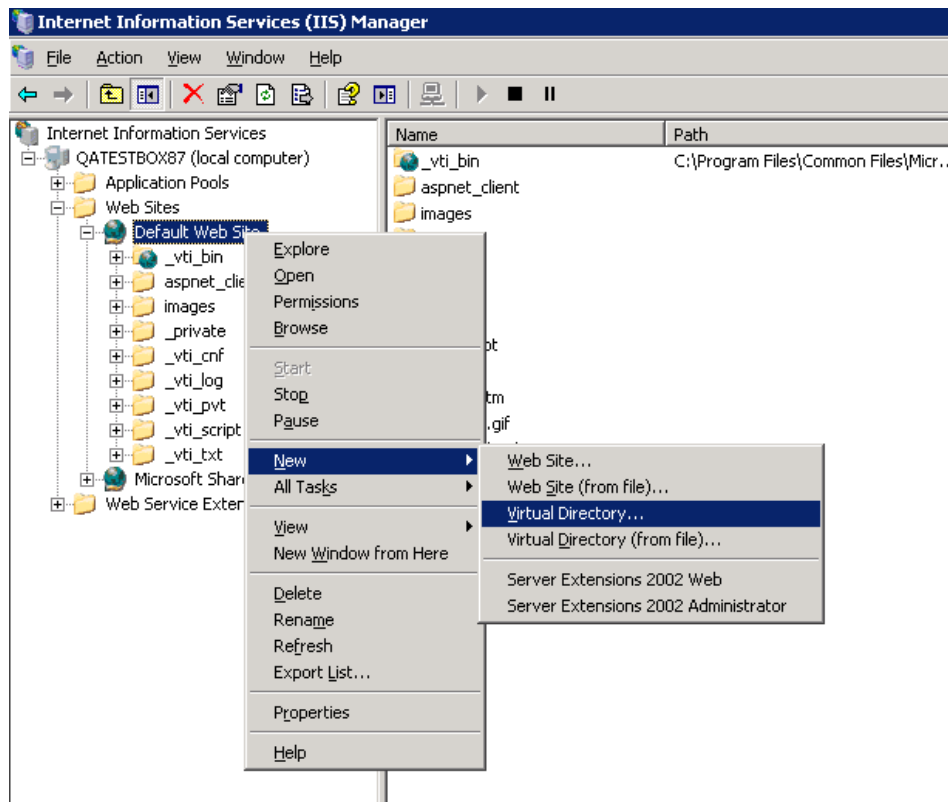


Figure 2: IIS 6.0 manager

4. In the dialog box, click **Next**.



Figure 3: Virtual Directory Creation Wizard

5. Type the Alias you want to use to gain access to this Web virtual directory. Click **Next**.

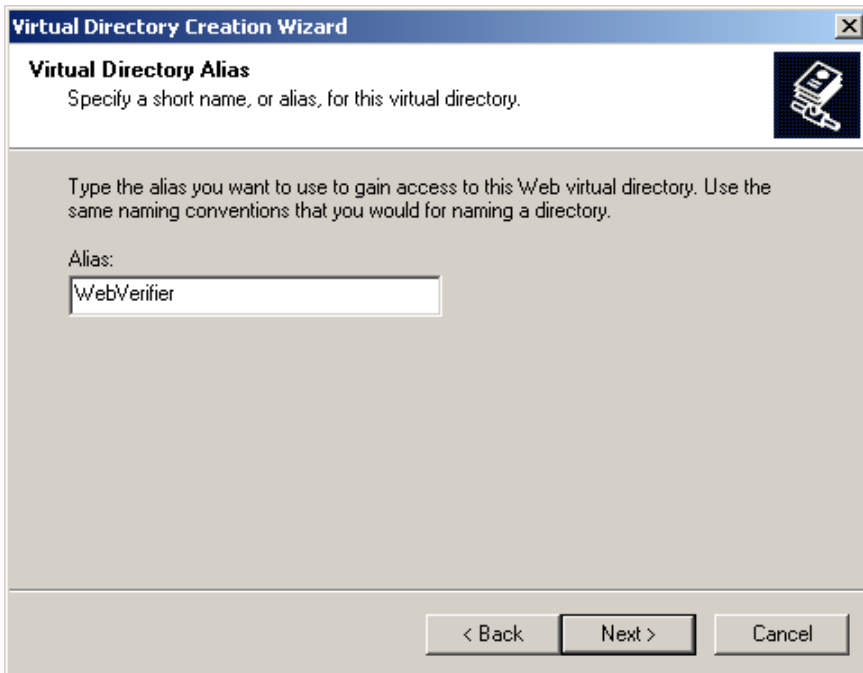


Figure 4: Alias for the Web virtual directory

6. Type or browse to the physical directory in which the virtual directory resides, and click **Next**.

7. Set the permissions as shown in the screenshot below. Click **Next**.

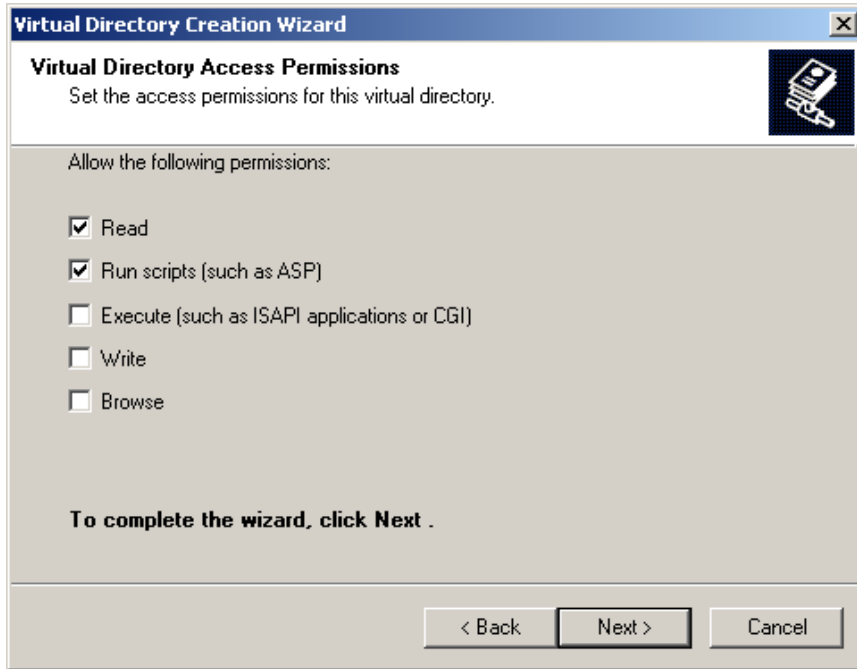


Figure 5: Virtual Directory Access Permissions

8. Click **Finish**.

9. Right-click the Web Verifier node then select **Properties**.

10. In the dialog box, click the **ASP.NET** tab.

11. Check the **ASP.net** version. If it is not a v.2.0 – set it to v.2.0.

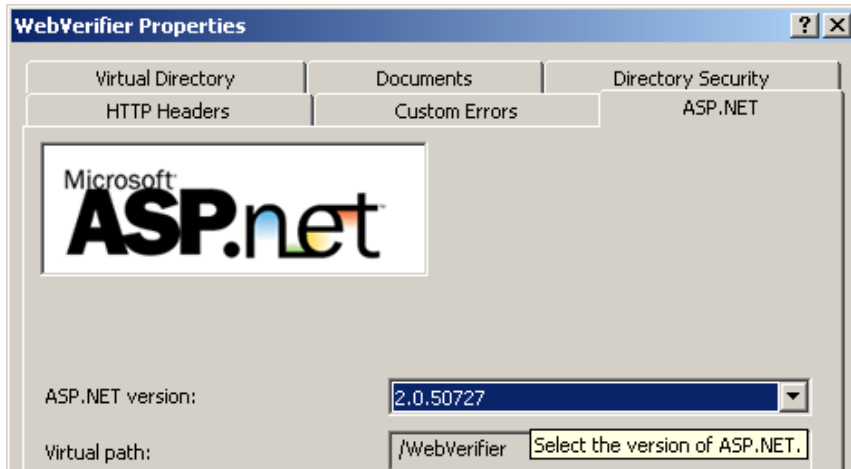


Figure 6: Setting the ASP.net version number

12. Select the **Documents** tab. Remove all default content pages, and add **Login.aspx** to the list.

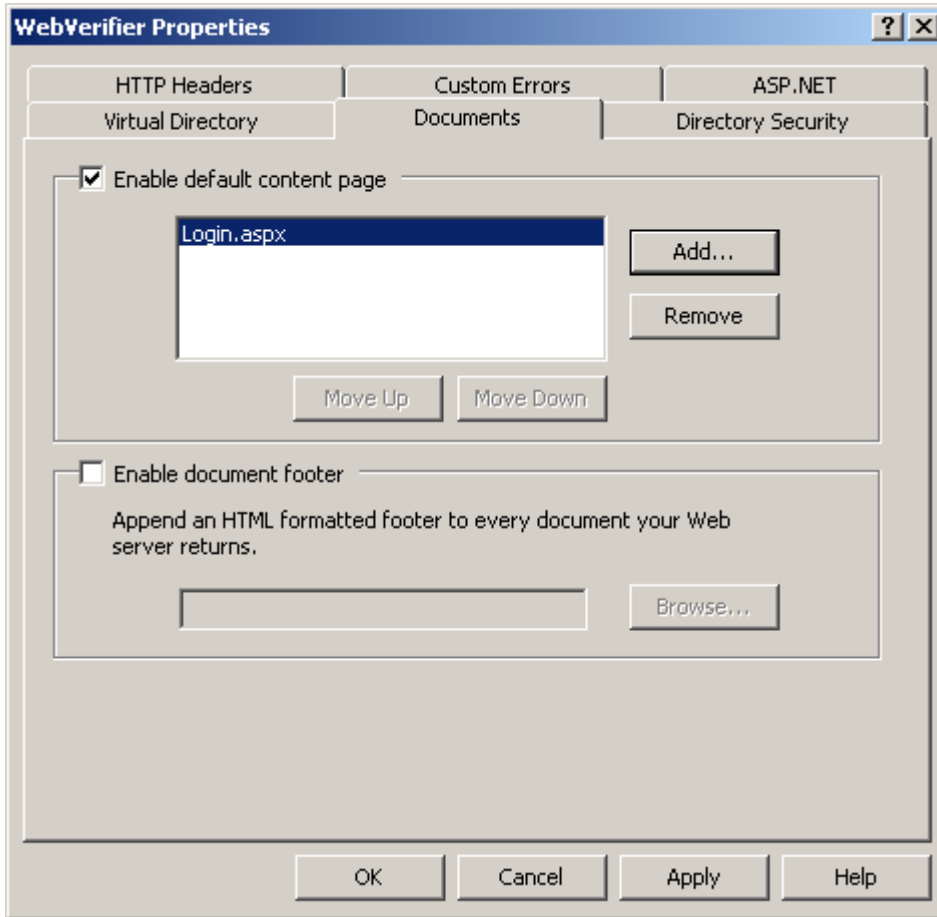


Figure 7: Documents tab – setting Login.aspx as default content page

13. Click **OK**.

The Perceptive Intelligent Capture Web Verifier application will be accessible by the address <http://localhost/WebVerifier/login.aspx>.

Configure Web Verifier in IIS 6

If you are using a Brainware-labeled version of the product, you do not have to complete the following task. For the Perceptive-labeled version, to configure the Web Verifier for in IIS7 Manager, complete the following steps.

1. To run the IIS manager, click **Start > Settings > Control Panel > Administrative tools – Internet Information Services**.
2. In **IIS Manager**, expand the local computer, and then expand the **Web Sites** node.
3. To create the WL virtual directory, right-click the site or folder in which you want to create the virtual directory, then choose **New > Virtual Directory**.
4. In the Virtual Directory Creation Wizard, click **Next**.

5. In the Alias field, type **WL** as the name for the virtual directory. The physical path should point to the **Cedar/WL** folder.

Configure IIS 7.0

1. Run Server Manager (**Start > Administrative tools > Server Manager**).
2. Extend the **Roles** directory.
3. Click **Add Roles**.
4. Select **Web Server (IIS)**. You are prompted to install other required features.
5. Click **Add Required Features**.

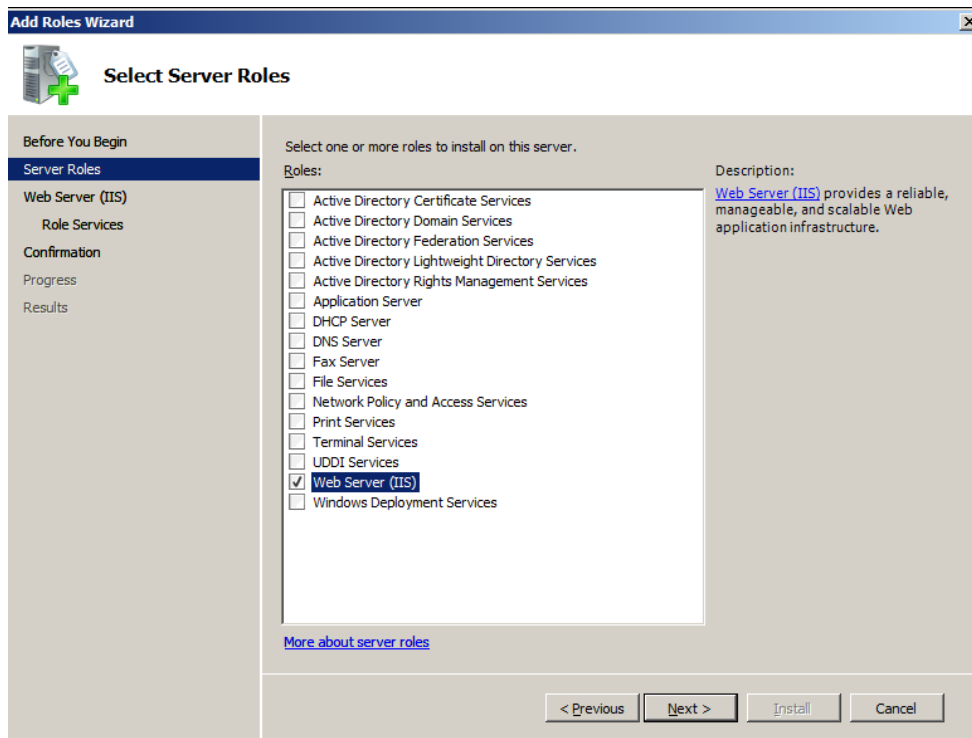


Figure 8: Selecting Server Roles

6. To select the Server Roles, complete the following substeps.
 1. Click **Next**.
 2. Continue by clicking **Next**.
 3. Select the **Role Services** as follows:

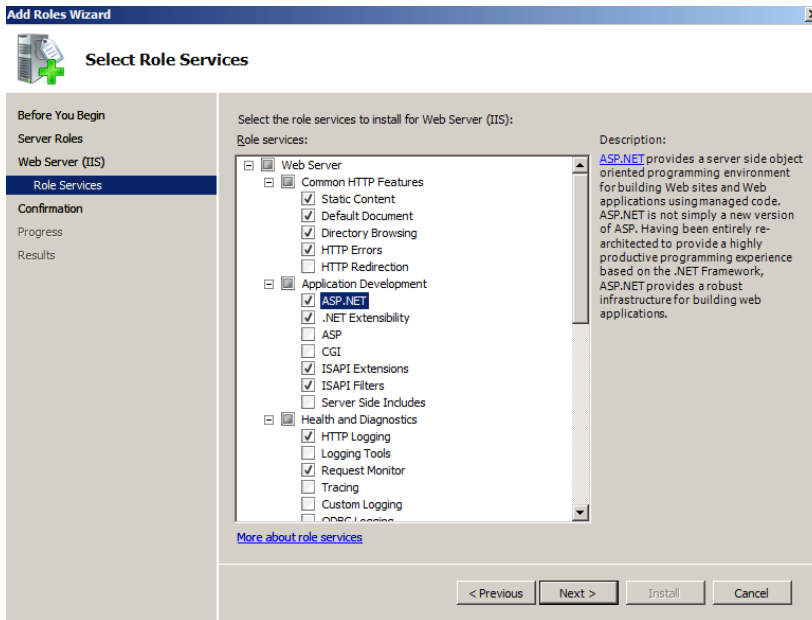


Figure 9: Roles selection example

7. To confirm your selections, click **Next**.
8. Click **Install** to install the selected roles, role services, and features.
9. Check the **Result** overview and finish by clicking on *Close*.
10. Now run IIS manager (**Start > Administrative tools > Internet Information Services (IIS) Manager**).

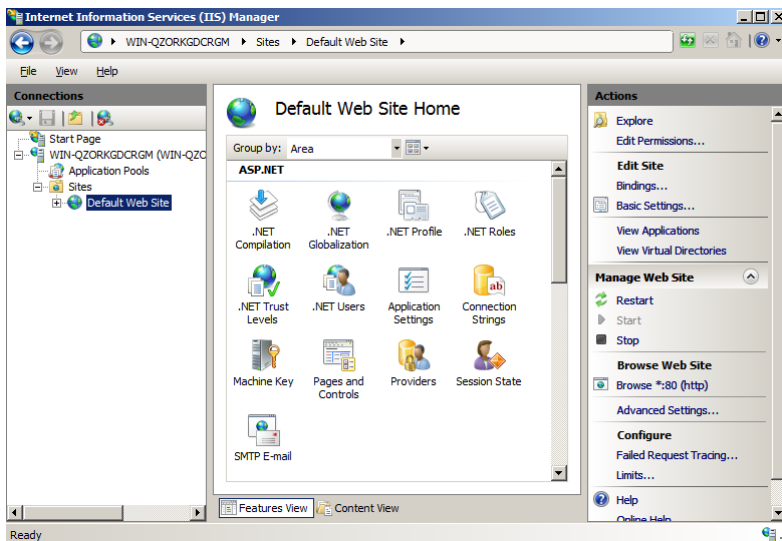


Figure 10: IIS Manager

11. Right-click **Default Web Site**.
12. Select the **Add Application** menu item.

13. In the dialog box, enter the Alias you want to use to gain access to this Web virtual directory, usually WebVerifier. Set the **Physical path** to the directory with the installed Perceptive Intelligent Capture Web Server and then click **OK**.
14. Double-click the **Default Document** icon for the WebVerifier application.

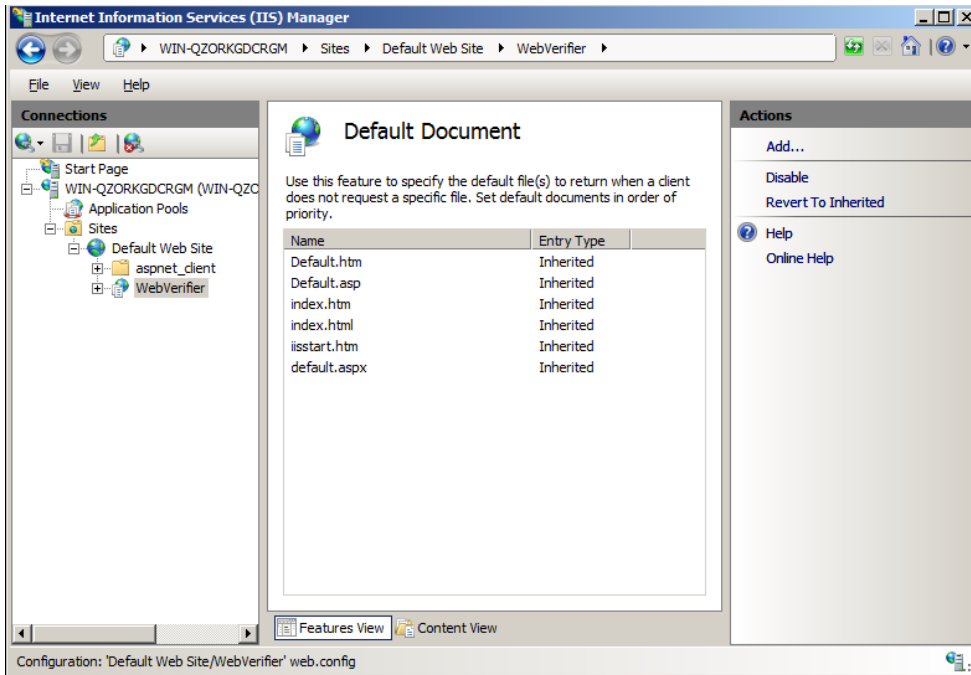


Figure 11: Setting the Default Document II

15. Click **Add** and add **Login.aspx** to the list.

The Perceptive Intelligent Capture Web Verifier application is accessible through the <http://localhost/WebVerifier/login.aspx> address.

Configure Web Verifier in IIS 7

If you are using a Brainware-labeled version of the product, you do not have to complete the following task. For the Perceptive-labeled version, to configure the Web Verifier for in IIS7 Manager, complete the following steps.

1. To run the IIS manager, click **Start > Settings > Control Panel > Administrative tools – Internet Information Services**.
2. Locate the Web Verifier application under the **Default Web Site** node.
3. To create the WL virtual directory, right-click on **Web Verifier** node, then choose **New > Create Virtual Directory**.
4. In the Alias field, type **WL** as the name for the virtual directory. The physical path should point to the **Cedar/WL** folder.

Windows 2008 64bit R2

To configure IIS 7.5 for your operating system, complete the following steps.

1. Create an application pool or change defaultAppPool with the following advanced properties.
 - Enable 32-bit applications = True
 - Managed pipeline mode = Integrated
 - Identity is set to NetworkService
 - Load User Profile = True
2. Assign the Web Verifier application to this application pool so that the application can run under 32-bit mode.

IIS 6.0 Metabase Configuration - MetaBase.xml

To configure the IIS 6.0 metabase configuration, complete the following steps.

1. Open Windows Explorer and go to **C:\Windows\System32\inetmgr**.
2. Find the **MetaBase.xml** file and make a backup copy.
3. Open the **MetaBase.xml** file in a text editor. Locate the **<IISCompressionScheme/>** section. Be careful, there are two sections here: one for **deflate** and one for **gzip**. Select the section for **gzip**. (Refer to [FIGURE 12](#)) The Location attribute of this element has the following value: Location = "/LM/W3SVC/Filters/Compression/gzip".
4. Locate the HcScriptFileExtensions section. As the default, it should contain: ASP, DLL, and EXE files. This is where you add any extensions you want compressed for dynamic files. For instance, you can add the extension ASPX.

Note Use a list format for the file extensions as in the sample below using a new line for each extension and indenting them using tabs.

For Web-Verifier, this section should resemble the following example.

```
<IISCompressionScheme Location ="/LM/W3SVC/Filters/Compression/gzip"
    HcCompressionDll="%windir%\system32\inetmgr\gzip.dll"
    HcCreateFlags="1"
    HcDoDynamicCompression="TRUE"
    HcDoOnDemandCompression="TRUE"
    HcDoStaticCompression="TRUE"
    HcDynamicCompressionLevel="10"
    HcFileExtensions="htm
        html
        txt"
    HcOnDemandCompLevel="10"
    HcPriority="1"
    HcScriptFileExtensions="asp
        dll
        exe
        aspx
        asmx
        js
        axd"
    >
</IISCompressionScheme>
```

Figure 12: MetaBase.xml

5. To save this document, open **IIS**, right-click the top node, **Internet Information Services**, and select **Enable Direct Metabase Edit**.
6. To exit IIS and restart, right-click the **Internet Information Services** node, and then click **All Tasks**, **Restart IIS**.

Run Multiple Web Verifier and RTS instances

Description

When running more than approx. 12 concurrent Web Verifier user sessions or more than approx. 14 Runtime Service instances, the system may start experiencing lack of Windows desktop heap resources and the extra user sessions / RTS instances can be failing with different internal memory allocation errors.

Cause

The default Windows OS setting of desktop heap size for the non-interactive Windows station often appears to be too low to host multiple simultaneously running Web Verifier or Runtime Service instances with extensive script engine utilization.

Recommended Configuration Changes

1. Open Windows Registry Editor.
2. Browse to the key [HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Session Manager\SubSystems\Windows].
3. Check or modify the third argument of the **SharedSection** parameter:

SharedSection=1024,3072,**512**

512 (KB) is exactly the default value that causes the issue as described in the "Problem Description" section above.

Note For some OS versions, this default setting can be different. The table below gives the recommended values for this setting:

# of RTS and/or WVC instances	DH Size in KB
1 – 10	512
11 – 24	1024
25 – 36	1536
37 – 48	2048
49 – 60	2560
61 – 72	3072

Legend

DH Size: Desktop heap size for non-interactive window station

of RTS and/or WVC: Cumulative number of simultaneously running Runtime Service instances PLUS number of concurrent Web Verifier users running on the same physical server.

4. After modifying this parameter reboot the server.

Configure Application

Configuring Application

There are some main configuration parameters to be accounted for. See [Appendix A](#) for more information.

Configure Perceptive Intelligent Capture Database connection string

To configure the connection string, complete the following steps.

1. Open the application configuration file (Perceptive Intelligent Capture Web Server\web.config)
2. Locate the following string.

```
<connectionStrings>
  <add name="Entities"
  connectionString="metadata=res://*/Entity.Entities.csdl|res://*/Entity.Entities.ssdl|
  res://*/Entity.Entities.msl;provider=System.Data.SqlClient;provider connection
  string=&quot;Data Source=NEO\SQLSERVER2005;Initial
  Catalog=Perceptive_verifier_work;Integrated Security=false;User ID=developer;
  Password=123456;MultipleActiveResultSets=True&quot;;
  providerName="System.Data.EntityClient" />
```

3. Modify the connection string in accordance with your database settings.
4. Replace the connection string within the **Brainware.System.Project.exe** config file by the one configured within the **web.config** file.

Note These two connection string entries must be identical to assure the availability of all Web Verifier functionalities associated with the Knowledge base.

Set path to license file

To set the path to the license file, complete the following steps.

1. Open the application configuration file (Perceptive\Perceptive Intelligent Capture Web Server\web.config)
2. Find the following string.

```
<project.controller>
  <project licensePath="{app_root}\License\Runtime.lic" ...
</project.controller>
```

3. Modify the `licensePath` value in accordance with the location of your license file.

Enable HTTP compression for IIS 6.0 and IIS 7.0

To enhance your application performance and to save server costs, it is recommended you enable HTTP compression in the context of the Internet Information Services.

Use the following links for detailed information.

For IIS 6.0:

<http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/d52ff289-94d3-4085-bc4e-24eb4f312e0e.mspx?mfr=true>

For IIS 7.0:

<http://technet.microsoft.com/en-us/library/cc771003.aspx>

Server Security Configuration

Register COM components

After applying a patch, locate and run the 'Register Web Server.bat' as administrator. It is located in the Perceptive Intelligent Capture Web Server\bin\ folder. For registering this component, complete the following steps.

1. Right-click the **Register Web Server.bat** file.
2. Select **Open** from the context menu.

Prepare the User Context

It is necessary for the user of the user context in which the Web Verifier is running in IIS to have the proper rights to access the SQL Server database. By default, the Web Verifier runs under the NETWORK SERVICE user context, hence the same should be allowed to access the database.

If you select *Windows Authentication* during the installation of Perceptive Intelligent Capture, you will need to add the domain username to the SQL Server DB additionally to the NT AUTHORITY\NETWORK SERVICE.

To add NETWORK SERVICE to SQL server, complete the following steps.

1. Open Microsoft SQL Server Management Studio.
2. Expand the local computer name, select **Security** → **Logins**.
3. Right-click **Logins** and select **New Login**.
4. In the **Login** dialog box, under **General**, click **Search**. In the **Select User or Group** dialog box, enter NETWORK SERVICE and then click **Check Names**. Click **OK**.
5. Select **sysadmin** (public is selected by default) for Server Roles. Click **OK**.

The **NT AUTHORITY\NETWORK SERVICE** is added to SQL server.

After adding Network Service to SQL server, make sure that the IIS is running under NT AUTHORITY\NETWORK SERVICE by opening the IIS Manager.

To open IIS Manager from *Start* menu, complete the following steps.

1. Click **Start** and select **Control Panel**.
2. Select **Administrative Tools** and click **Internet Information Services (IIS) Manager**.
3. In the **Connections** pane, expand the server node and click **Application Pools**.

4. In the **Application Pools** pane, select the application pool which you want to specify an identity, and then click **Advanced Settings** in the **Actions** panel.
5. For the identity property, the built-in account should be **NetworkService**.

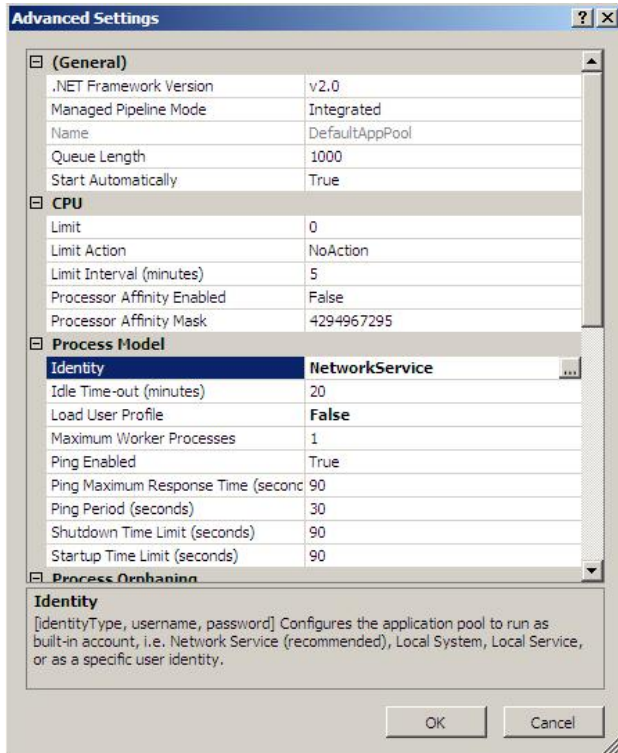


Figure 13: Identity.

1. If it does not contain **NetworkService**, click **Set** to open the **Application Pool Identity** dialog box.
2. Select the **Built-in account** option and select **NetworkService** account from the list.

Set Permissions for Perceptive projects execution

All Perceptive projects are located in a filesystem folder. The Web Verifier sources this path from the Perceptive Intelligent Capture Database. Perceptive projects are loaded by the "Brainware.System.Project.exe" process. This process cannot load the projects until it has the appropriate permissions for the projects folder. In this case, to grant permission to the "Network Service" Windows user for this folder, complete the following steps.

1. Select the projects folder.
2. Right-click the folder and select **Properties**.
3. In the dialog box, click the **Security** tab.
4. Add the **Network service** user to the list.

Encrypt sections with aspnet_regiis tool

If you want to protect the data stored in the configuration file perform the following steps:

Pre-configuring:

- Find the **Brainware.System.AppConfiguration.dll** file in the Perceptive Intelligent Capture\bin\ directory.
- Register this assembly in the GAC using the **gacutil -I Brainware.System.AppConfiguration.dll** command.

Encryption of the web.config file:

- Use the aspnet_regiis command-line tool. This tool is located at:
C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\aspnet_regiis.exe
- For encrypting a particular section of the configuration file, you can use the -pe option when executing the **aspnet_regiis** tool.

For example, for encryption of the connectionStrings section use:

aspnet_regiis -pe connectionStrings -app/MyApp

Note The “-app” option is used to specify the application’s virtual path.

Decryption of the web.config file:

- For decryption of a configuration section, use the following command: **aspnet_regiis -pd connectionStrings -app/MyApp**

Client Security Configuration

This section describes security configuration for the client side.

- Open your Internet Browser. Select **Tools > Internet Options**, and then select the **Security** tab. Click **Custom Level...**

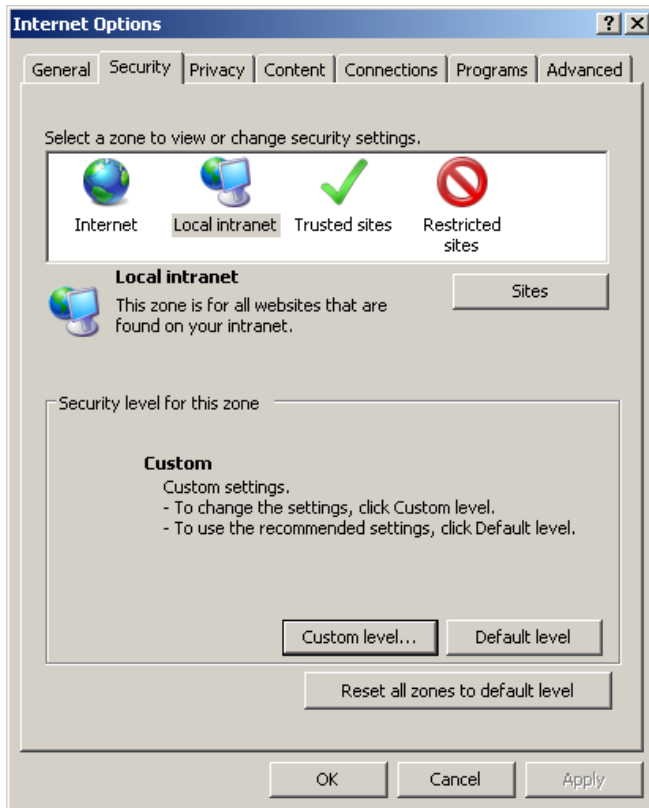


Figure 14: Internet Browser – Security tab

- Check for the configuration settings (See the screenshots below)
- ActiveX controls and plug-ins:
- **Binary and script behaviors** setting should be **Enable**.
- **Run ActiveX controls and plug-ins** setting should be **Enable**.

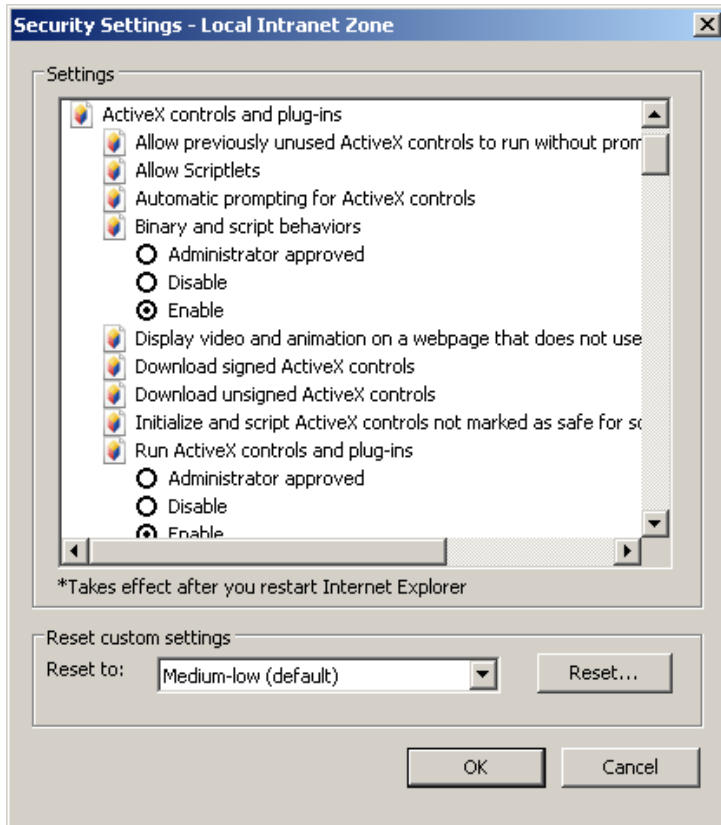


Figure 15: Custom level configuration settings – ActiveX controls and plug-ins

- Scripting
- Active scripting setting should be Enable.
- Allow status bar updates via script setting should be Enable.

Note Only if allowing status bar updating via script is enabled, will the information on batches, documents, current filters and page number be displayed.

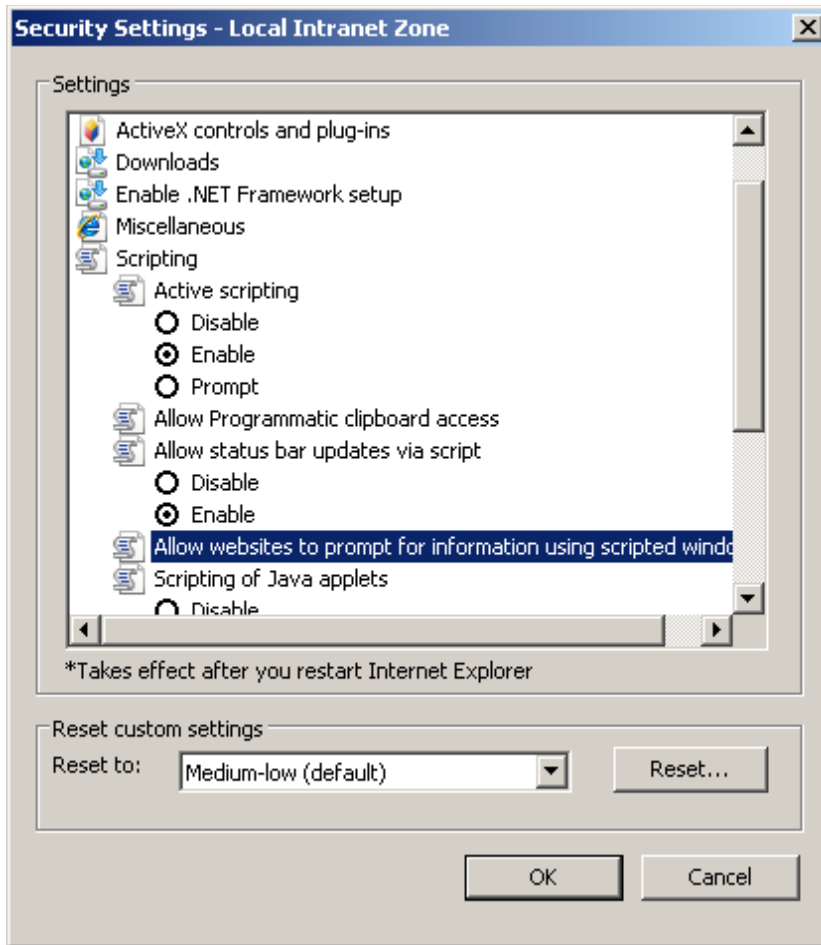


Figure 16: Custom level configuration settings – Scripting

Configure Single Sign-On Authentication for Web Verifier

Note Configuration of the SSO Service Provider is out of scope of this document. Refer to the provider’s product documentation.

Web Verifier has been enhanced to support Single Sign-On (SSO) user authentication. The SSO implementation will intercept user’s login request and either gather the user credentials and authenticate the user, or accept the user as already authenticated.

The SSO functionality is implemented as a generic solution to work with any SSO implementation and configuration that provides the user credential information via an HTTP header.

Enable Single Sign-On Authentication

To turn on external authentication, the following changes are required in the web.config file:

1. Check the <verifier.webclient> section for the <httpHeaderBasedSso> parameter.
2. Set the flag for the enabled setting to true: <httpHeaderBasedSso loginHeader="idUserName" enabled="true" sessionHeader="ShibSessionID" />
3. Set the loginHeader value to the HTTP header attribute name which is returned by the SSO service - for example, loginHeader="remoteuser".
4. Set the sessionHeader parameter to the default session ID header used by the SSO provider.

SSO Session vs. Web Verifier Client Session

There are two different sessions when SSO is used – SSO session and WVC session. SSO session has generally longer life as it might be used for other applications and not only for WVC.

WVC and SSO sessions are renewed with every server request (for example field validation, opening next batch), and are not renewed with client-side actions (for example zooming in page image or typing a value into form field without validating it).

Note When SSO authentication mode is used, the WVC session timeout must be set to a smaller value than the SSO session timeout. Otherwise, if the SSO session times out while the WVC session is still active, the user will be re-directed to the SSO login page, and any changes made in Web Verifier will be lost.

```
<sessionState timeout="20"/>
```

Refer to the product documentation of your SSO provider for details how to configure the SSO session duration.

Configure Windows Authentication for Web Verifier

The Web Verifier application allows you to login with your Windows user account. In this case, the password that is shared with Windows will be used to login into Web Verifier.

To use this option, you first need to configure the server.

Note Only Windows Authentication access is possible after this option is configured. However, when logged in to Web Verifier through Windows Authentication, it is possible to use the re-login menu option to login for example as an administrator to perform certain administrative tasks.

The prerequisites that apply to both IIS 6 and IIS 7 are listed below.

- Before you start to configure IIS, make sure that the Web Verifier application is working properly using an existing project user account.
- Back up the **web.config** file.

For IIS 7

To configure Windows Authentication access to Web Verifier with IIS 7:

1. Open **Authentication** settings in IIS group for the WebVerifier application.
2. Enable **Windows Authentication** and disable all other authentication methods.
3. Close all of the running browser sessions prior to access the Web Verifier application.
4. Add the Windows user to the database. Refer to the *Designer User Guide* for information on how to do this.

Note In IIS 7, Error Pages are configured automatically.

For IIS 6

To configure Windows Authentication to Web Verifier with IIS6, complete the following steps.

1. Open the **WVC application** properties.
2. Select the **Directory Security** tab. In the Authentication and access control section, click **Edit**.

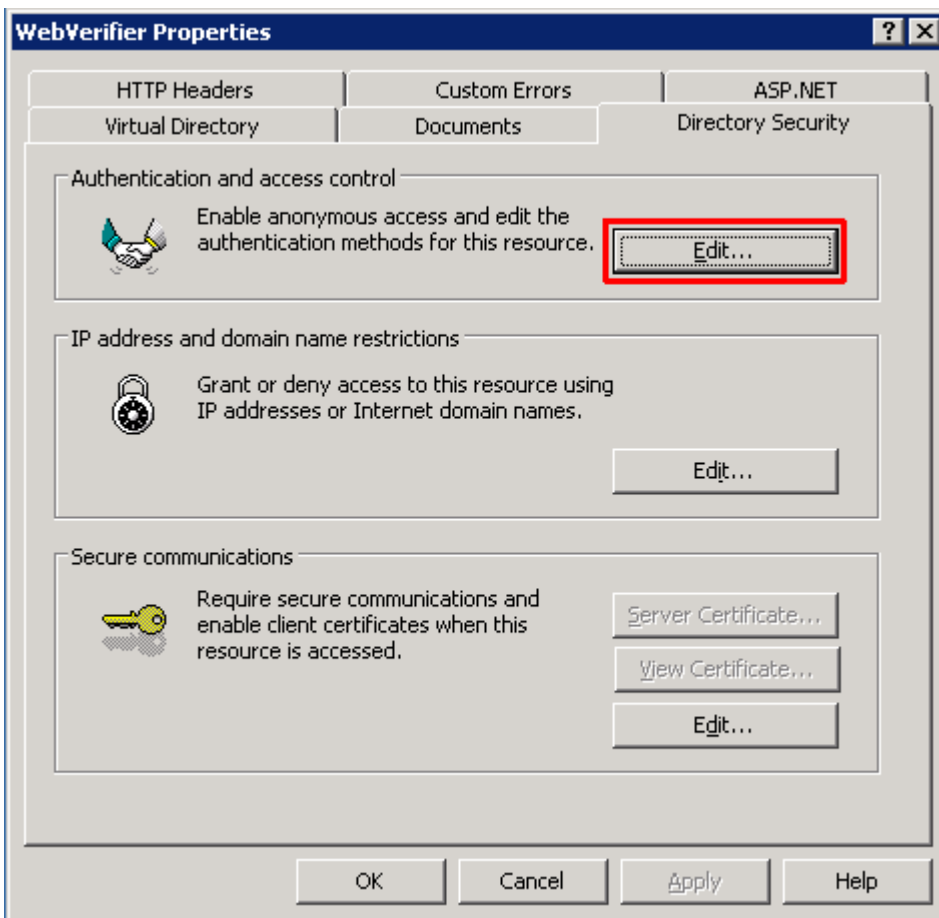


Figure 17: Entering the Authentication and access control area

3. In the **Authentication methods** dialog box, enable **Integrated Windows Authentication** and disable all other authentication methods

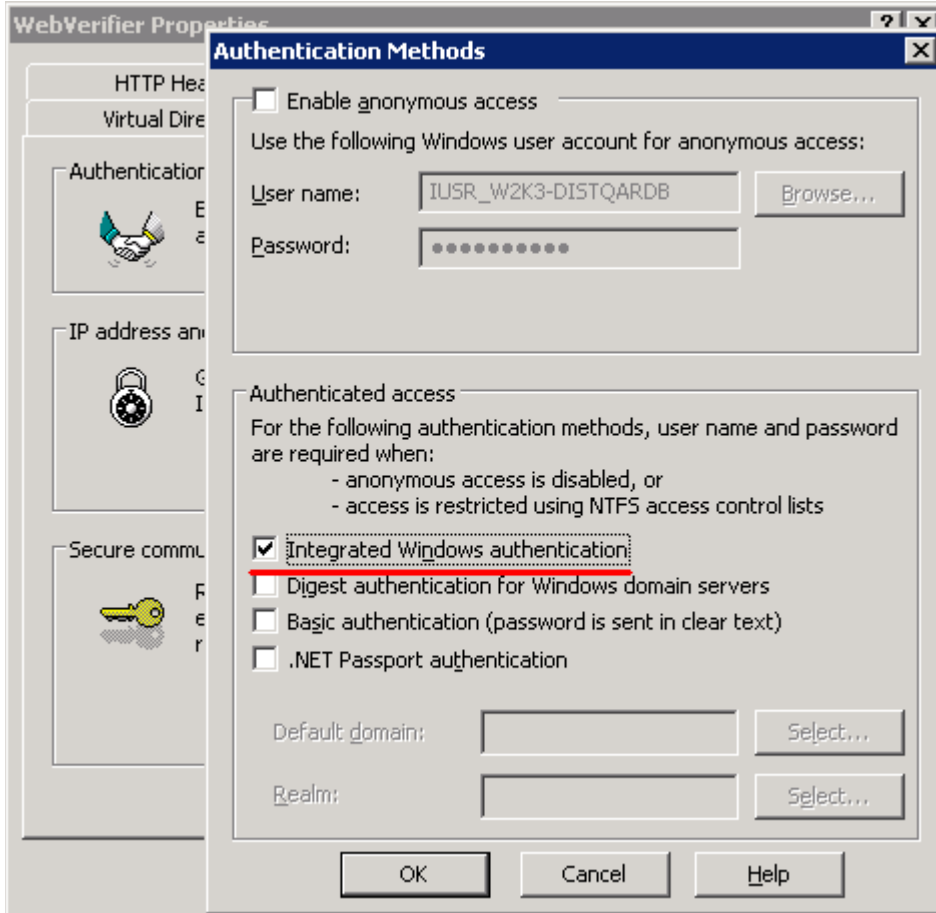


Figure 18: Enabling/Disabling authentication methods

4. To enable the custom error page for **Not Authorized** status, which is required to configure IIS to redirect to <Web Verifier Installation Directory>/ErrorPages/401.htm when a 401.x error is received, complete the following substeps.
 1. Select **WVC application properties**.
 2. On the **Custom Errors** tab, select all of the 401;x error code properties and click **Edit**.
 3. In the **Edit Custom Error Properties** dialog box, select **File for Message Type**.
 4. Enter the path to the <Web Verifier Installation Directory>/ErrorPages/401.htm file.

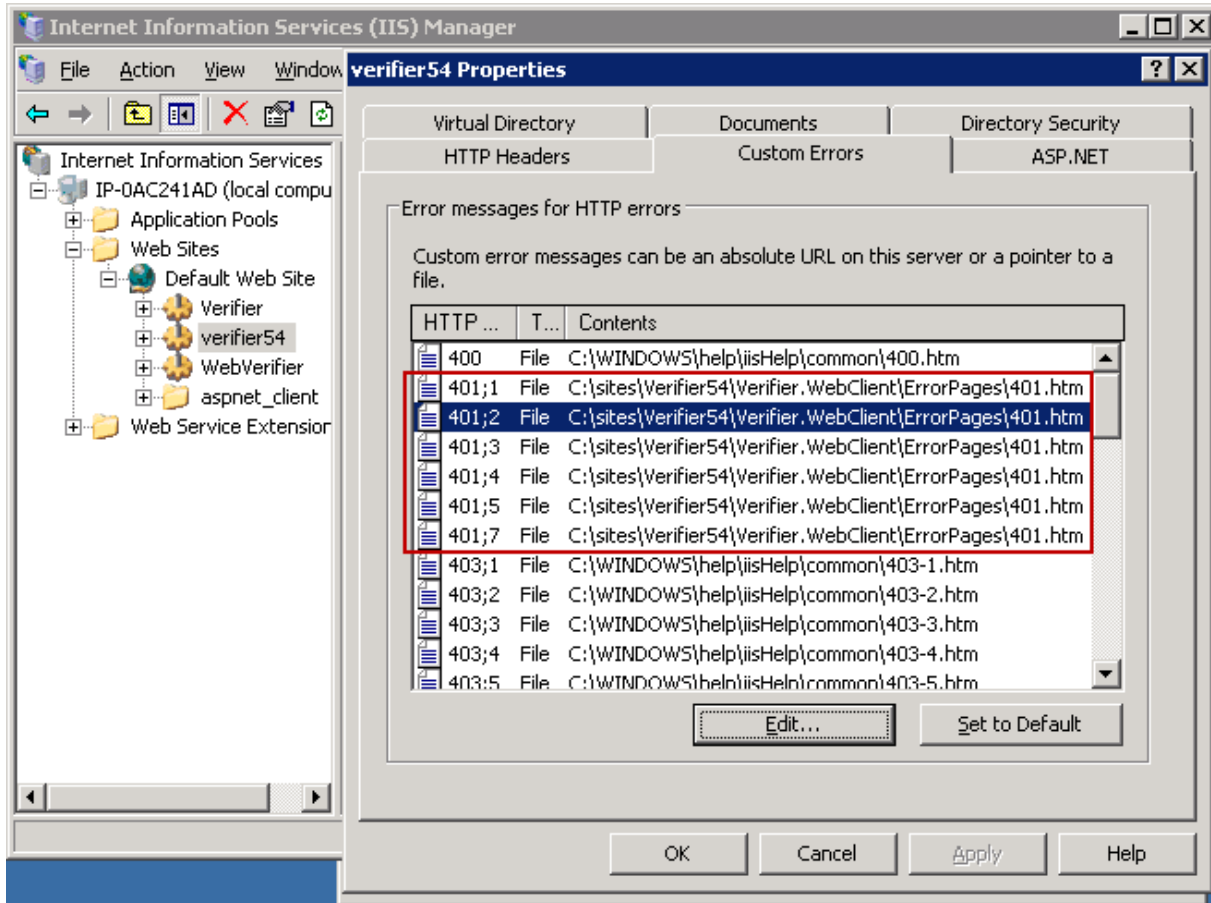


Figure 19: Custom Error properties for 401 errors

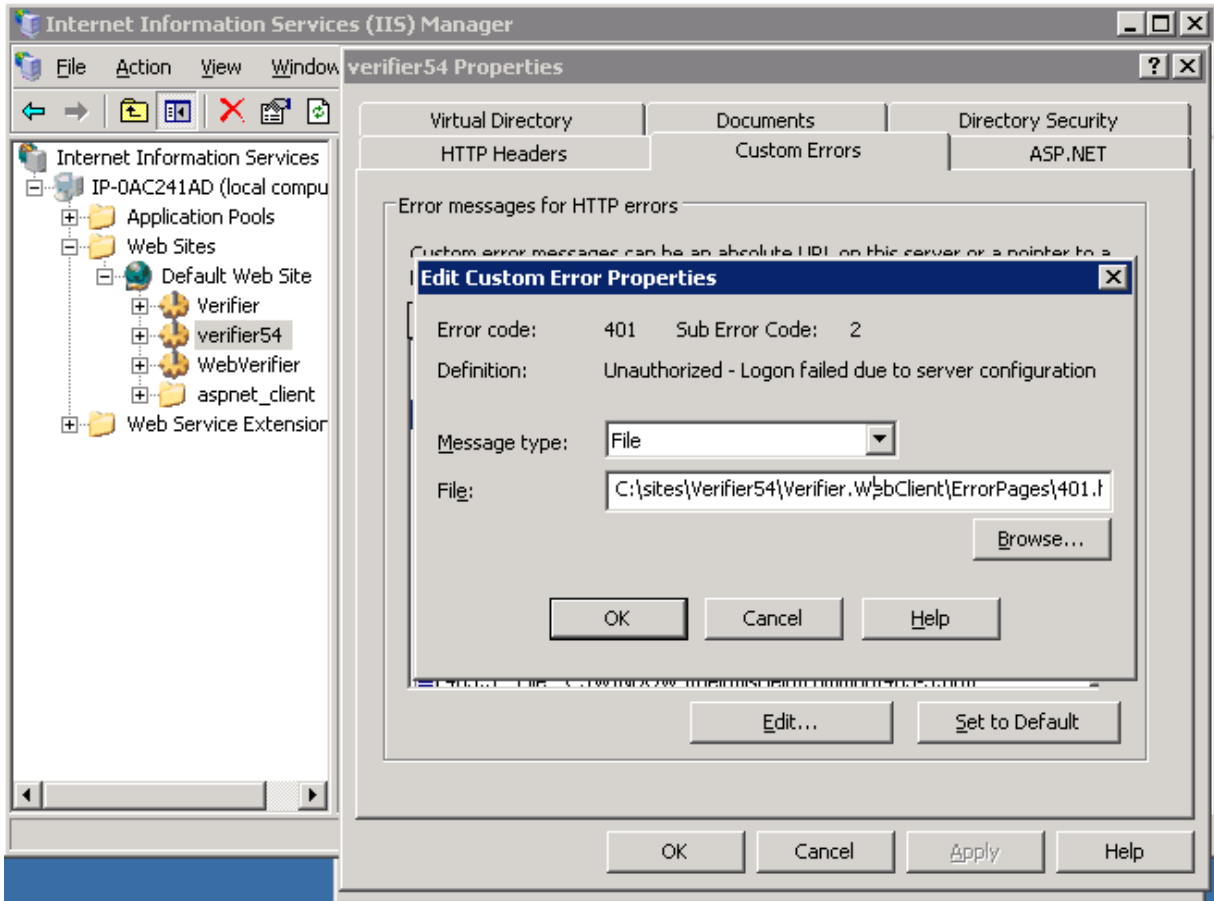


Figure 20: Editing Custom Error properties

5. To enable custom error page for Not Found status, which is required to configure IIS to redirect to <Web Verifier Installation Directory>/ErrorPages/404.htm when 404.x error is received, complete the following substeps.
 1. Select **WVC application properties**.
 2. On the **Custom Errors** tab, change all 404;x error code properties to point to the <Web Verifier Installation Directory>/ErrorPages/404.htm file.

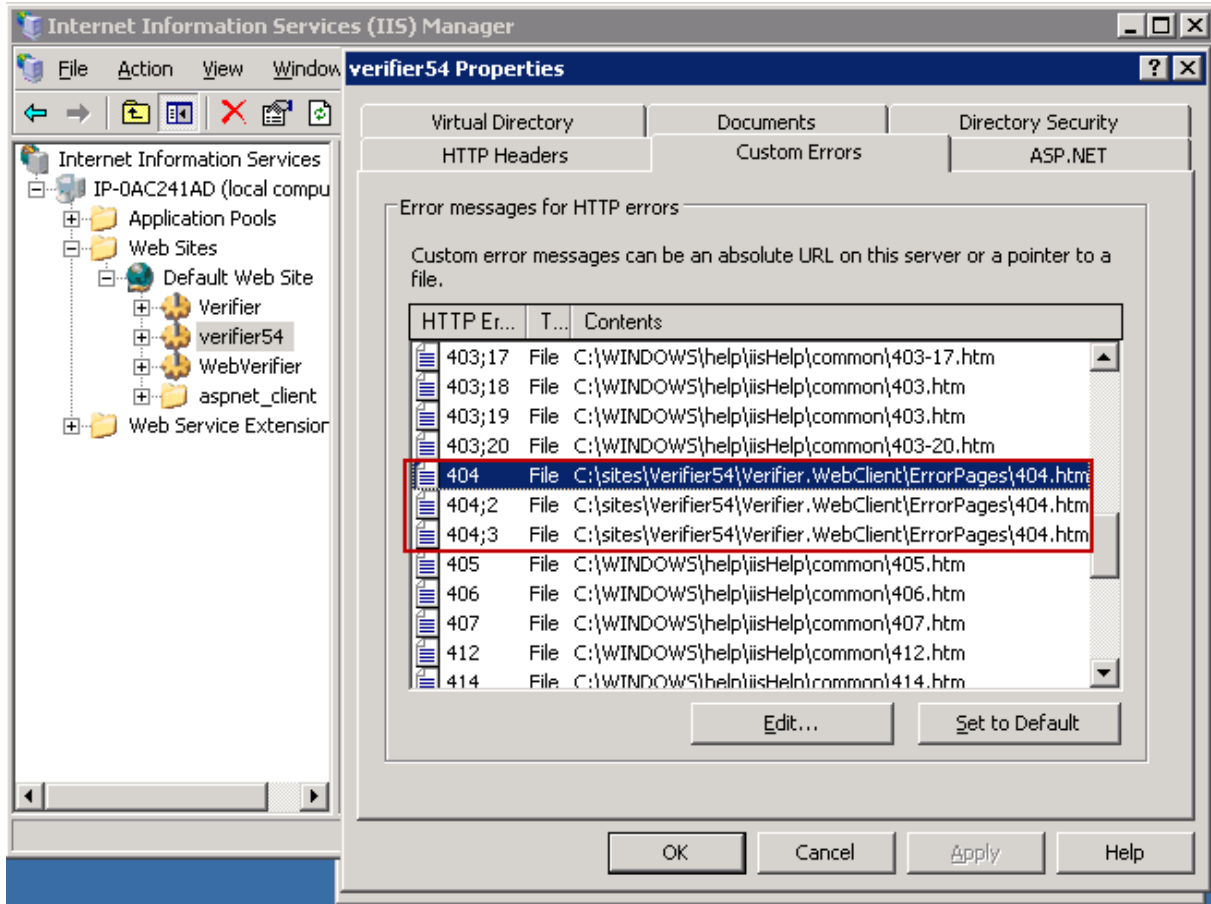


Figure 21: Custom Error properties for 404 errors

6. To prevent the **Not Found** page from being shown for invalid ASPX addresses (such as Batch.aspx – does not exist but would be a valid page name from IIS point of view), complete the following substeps to configure IIS.
 1. Go to properties of Default Web site.
 2. On the **Home Directory** tab, click the **Configuration** button.
 3. In the Network and Configuration dialog box, select the **Mappings** tab.
 4. Select the **.aspx** extension option from the list and click **Edit**.
 5. Select the **Verify that file exists** check box.

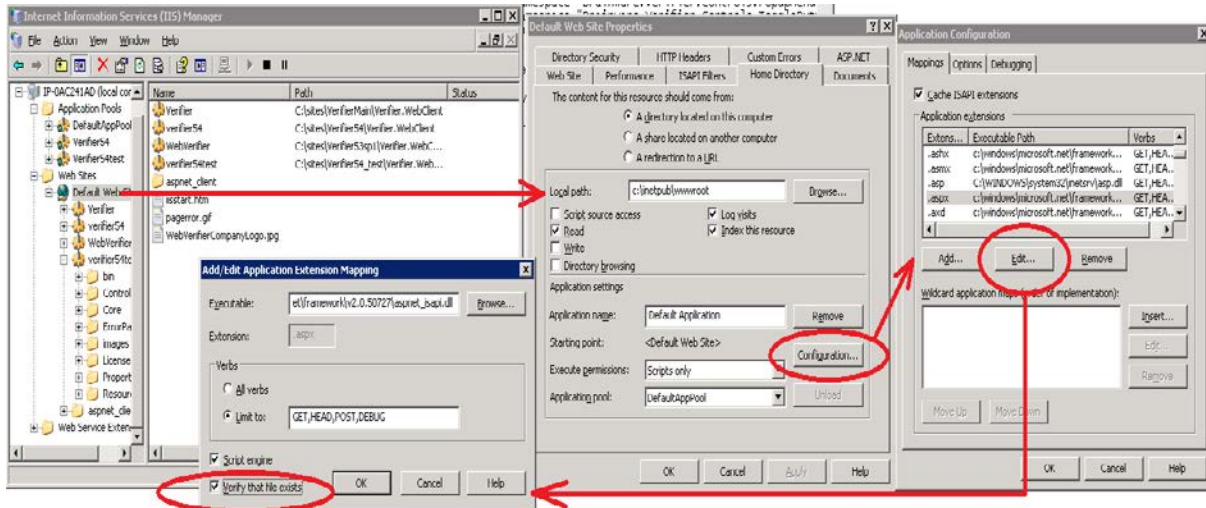


Figure 22: Configuring the “Not Found” page to be shown

7. After submitting, the **Inheritance Overrides** dialog box displays. Select the **WebVerifier** application to apply this setting.

Note The **Not found** error page configuration is also used for standard authentication mode.
8. The web.config file needs to be modified. Refer to the **.Changes to Web.config File** section.
9. Close all of the running browser sessions prior to accessing the Web Verifier application.
10. Add the Windows user to the database. Refer to the *Designer User Guide* for information on how to complete this task.

Changes to Web.config File

It is highly recommended to have two versions of the web.config file – one for standard authentication and one for Windows Authentication. This will simplify switching between modes.

The following list shows required steps to convert standard web.config to a web.config with Windows Authentication enabled.

The steps generally apply to both, IIS 6 and IIS 7. Exceptions are mentioned appropriately.

1. Change `<authentication>` section (located in the `<configuration><system.web>`) to the following:


```
<authentication mode="Windows">
```

2. Remove the following line:
`<forms loginUrl="Login.aspx" defaultUrl="BatchView.aspx" />`
This is a child of the `<authentication>` section, and is only needed for standard authentication.
3. Change `<authorization>` section (located in the `<configuration><system.web>`) from 'deny' to 'allow':
`<authorization>`
`<allow users="?" />`
`</authorization>`
4. Add `enableSessionState` attribute to `<pages>` section (located in the `<configuration><system.web>`):
`<pages enableSessionState="true">`
5. Remove all `<location>` sections (located in the `<configuration>` right before `<appSettings>`). Those sections look like the following:
`<location path="WL">`
`<system.web>`
`<authorization>`
`<allow users="*" />`
`</authorization>`
`</system.web>`
`</location>`
6. This step only applies to IIS 6.
For correct display of 'Not Found' error page add section `<customErrors>` after `<authorization>` section to be the following
`<customErrors mode="On" defaultRedirect="~/Error.aspx">`
`<error statusCode="404" redirect="~/ErrorPages/404.htm" />`
`</customErrors>`
The page referenced here is the same 404.htm that was configured in IIS settings.
This "Not found" error page configuration is also used for standard authentication mode.

Revert Back to Standard Authentication

To switch from Windows Authentication mode back to standard authentication mode, the following adjustments to IIS are required:

IIS 7.x (Windows 7, Windows Server 2008, Windows Server 2008 R2)

Refer to **Step 2** of the **For IIS 7** section. Disable Windows Authentication and enable both, Anonymous and Forms Authentication.

IIS 6 (Windows Server 2003)

Refer to **Step 3** of section For IIS 6. Disable Windows Authentication and enable Anonymous Authentication.

Changes to Web.config

Get the back up file which was done at the beginning of the configuration process.

Configuring SSL for Web Verifier

For information on how to set up SSL on your Information Services machine, refer to the respective third party product documentation.

Configure Additional Languages

Web Verifier supports an extended list of languages:

Chinese Simplified, Chinese Traditional, Danish, Dutch, English, French, Finnish, German, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Spanish, Swedish, Turkish.

Note By default, the Chinese language selection points to Simplified Chinese. In case Traditional Chinese language has to be used, the content of the Bin\Resources\cmn folder can be copied into the "zho" folder, which contains the Simplified Chinese. Prior to overwriting the "zho" folder content, **back it up**. To display the correct language on the drop-down list of the language selection menu, a web.config change for the parameter LanguageDisplayName is needed. Refer to **Appendix A** for more information

Virus Check

The settings for the Virus Checker on the Web Server exclude the [Local Temp Folder]/CdrDbCache directory (Batch and the Common Learnset folders) from the locations which are checked for viruses. This is due to performance considerations.

Enable New Columns for Batch View

Four additional columns are available to hold additional information on batches:

- Batch.ExternalGroupId - default display name: "User Group"
data type: The Group ID which has been assigned to a batch is relating to security. Batches can be assigned to user group via a unique ID. For example, German invoices belong to Group 1 and English invoices belong to Group 2. When in a shared service center, you could hide all German invoice batches from English Verifiers.
- Batch.ExternalBatchId - default display name: "Batch Group"
data type: It allows the developer to uniquely identify the batch. For example, external system ID, storage box ID, etc.

- Batch.TransactionId - default display name: "Transaction"
data type: It allows the developer to synchronize a newly created batch of documents with another external system. It can be used to identify originators of batch of documents.
- Batch.TransactionType - default display name: "Transaction Type"
data type: It allows the developer to synchronize a newly created batch of documents with another external system. It can be used to identify the types of documents (Invoices, Claim forms etc.) in batches or source of document (Email, Scanned etc.)

These table columns are not Perceptive Intelligent Capture project or application specific and therefore cannot be configured in Designer or Verifier or RTS applications.

By default, these columns will be invisible. To configure the columns' visibility for Web Verifier, adjust the batch columns' attributes in the batchColumnVisibility section of the web.config file appropriately (refer to [Appendix A](#)).

The values of the columns can only be set via the Project Script (PostimportBatch). Check the SQL scripts in the installation folder to activate the displaying of those columns. After enabling one or all of the additional columns in database, it applies to all application modules.

The additional columns can be enabled with columns customized.

For SQL:

Syntax

```
exec sp_SetGlobalApplicationSetting 'ColumnSettingName', 'Column Name to Display', Enabled Boolean
```

Examples

```
exec sp_SetGlobalApplicationSetting 'SysAppBatchColumnExternalGroupId', 'User Group', True
exec sp_SetGlobalApplicationSetting 'SysAppBatchColumnExternalBatchId', 'Batch Group', True
exec sp_SetGlobalApplicationSetting 'SysAppBatchColumnTransactionId', 'Transaction', True
exec sp_SetGlobalApplicationSetting 'SysAppBatchColumnTransactionType', 'Transaction Type', True
```

Note For setting up the Group ID column, due to the security control, make sure the group ID is matching with the ID created for the users.

For Oracle:

Syntax

```
exec sp_SetGlobalApplicationSetting ('ColumnSettingName', 'Column Name to Display', Enabled Boolean)
```

Examples

```
exec sp_SetGlobalApplicationSetting ('SysAppBatchColumnExternalGroupId', 'User Group', 1)
```

Change Custom Column Names

After you have enabled new custom columns following the instructions in section [Enable New Columns for Batch View](#), you may want to give them more meaningful names.

Custom Column Names for Web Verifier

To change the custom column names for the Web Verifier application:

1. Navigate to **C:\Program Files (x86)\Perceptive\Perceptive Intelligent Capture Web Server\Bin\Resources\eng**.
2. Open the file in notepad: **Brainware.Verifier.WebClient.resx**.
3. Change the name of the four items below by adjusting the value parameter (highlighted in red in the sample below):

Example

```
<data name="TEXT_EXTERNALBATCH_NAME" xml:space="preserve">
  <value>External Batch ID</value>
</data>
<data name="TEXT_EXTERNAL_GROUP_ID" xml:space="preserve">
  <value>User Group</value>
</data>
<data name="TEXT_TRANSACTION_ID" xml:space="preserve">
  <value>Transaction ID</value>
</data>
<data name="TEXT_TRANSACTION_TYPE" xml:space="preserve">
  <value>Transaction Type</value>
```

For the other application languages, repeat the steps outlined above using the appropriate Brainware.Verifier.WebClient.resx file from the appropriate folder under: **C:\Program Files (x86)\Perceptive\Perceptive Intelligent Capture Web Server\Bin\Resources**.

Custom Column Names for Thick Verifier Client

For the Thick Verifier Client, custom column names can be changed via SQL Script. Run the below mentioned script by changing the 'Column Name to Display' value.

Syntax

```
exec sp_SetGlobalApplicationSetting 'ColumnSettingName', 'Column Name to Display',
Enabled Boolean
```

Example

```
exec sp_SetGlobalApplicationSetting 'SysAppBatchColumnExternalGroupId', 'User Group',
True
```

Global Application Setting Configuration

This setting is taken place in SQL server, and it enables/disables Workflow History Reporting, disables Batch Deletion in Designer/ MMC, and enables some additional custom columns.

This feature allows user to enable/disable for Document Level, Field Level, table Level, Classification, Document Separation, Learning, etc.

Note This feature is only available for the Database.

To execute the setting, complete the following step.

1. Launch the **SQL Server Management Studio**.
2. Point to the **Perceptive Database**.
3. Type the following script:

```
exec sp_SetGlobalApplicationSetting 'SysAppHistoryReportingActivatedForDocument', 'True', True
```

- *Setting Name* is the text name of the setting to be modified for application.
- *Setting value* is the text value to configure for it.
- *Status Flag* contains True (Setting enabled) or False (Setting disabled). This is disabled by default in the current version of Perceptive Intelligent Capture.

To enable item with Document Level:

```
exec sp_SetGlobalApplicationSetting 'SysAppHistoryReportingActivatedForDocument', 'True', True
```

To enable item with Field Level:

```
exec sp_SetGlobalApplicationSetting 'SysAppHistoryReportingActivatedForField', 'True', True
```

To enable Batch Deletion in Designer (Default setting):

```
exec sp_SetGlobalApplicationSetting 'SysAppBatchDeletionDisabledInDesigner', 'True', False
```

To disable Batch Deletion in Designer:

```
exec sp_SetGlobalApplicationSetting 'SysAppBatchDeletionDisabledInDesigner', 'True', True
```

To enable Batch Deletion in RTS (Default setting):

```
exec sp_SetGlobalApplicationSetting 'SysAppBatchDeletionDisabledInRTS', 'True', False
```

To disable Batch Deletion in RTS:

```
exec sp_SetGlobalApplicationSetting 'SysAppBatchDeletionDisabledInRTS', 'True', True
```

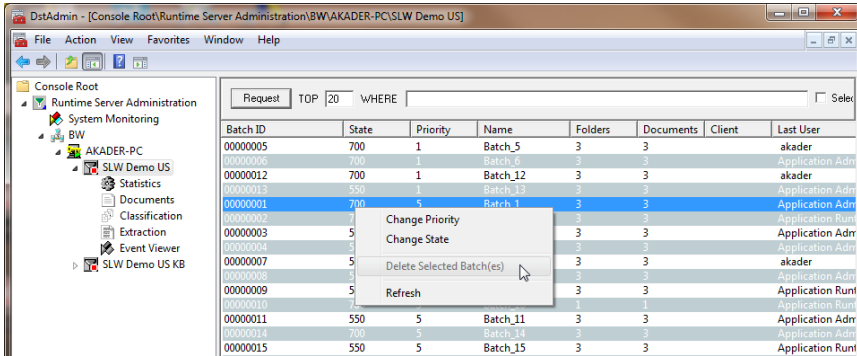


Figure 23: Delete Batch Function is disabled in RTS

It takes immediate effect right after you have configured it in the SQL Server and it applies to all users under the Perceptive Database.

Security

Perceptive Intelligent Capture Security

Project Security

Perceptive Intelligent Capture contains an internal application security model with 5 project security roles:

- **Administrator**: The Administrator's role (ADM) is to manage users, groups, and user-to-group assignments. Administrators install the system, configure applications, and manage data. They also design and maintain projects. This role is the most powerful of the roles because it is the highest role within Perceptive Intelligent Capture.
- **Learnset Manager**: The Learnset Manager (LSM) role is used to define, modify, and maintain the global project Learnset. Reference Perceptive Intelligent Capture Designer and Verifier documentation for additional information.
- **Supervised Learning Verifier**: The Supervised Learning Verifier (SLV) role is to collect and manage the local training data. These verifiers are subject-matter experts who can propose Learnset improvements.
- **Verifier User**: The Verifier role (VER) is to make document correction that could not be automatically processed. Typically members of this group are data correction users.
- **Setting Role**: The Verifier Settings (SET) role is used to give permission to the Verifier (VER) to alter or access the verifier configuration settings.
- **Filtering Role**: The filtering role (FLT) is to allow Verifier user to configure custom filtering of batches. By application design, FLT users would be able to use the filtering feature even if they do not have the SET role. This solution provides more flexibility and security.

Note Additional information on adding users and groups can be found in the Designer documentation.

Project & Windows Authentication Security

Local workstations and network Windows users can be imported into the Perceptive Intelligent Capture project authentication sub-system allowing automatic project authentication with the currently logged in Windows user account for all Perceptive Intelligent Capture applications.

To enable Windows based authentication in Perceptive Intelligent Capture for a desired Perceptive Intelligent Capture project:

1. Open the corresponding project file in the Perceptive Intelligent Capture Designer application
2. Select **Options, Users, Groups and Accounts** menu item
3. Enable **Allow Windows Authentication** check-box on the **Users** tab of the **Project Authentication Settings** dialog box.

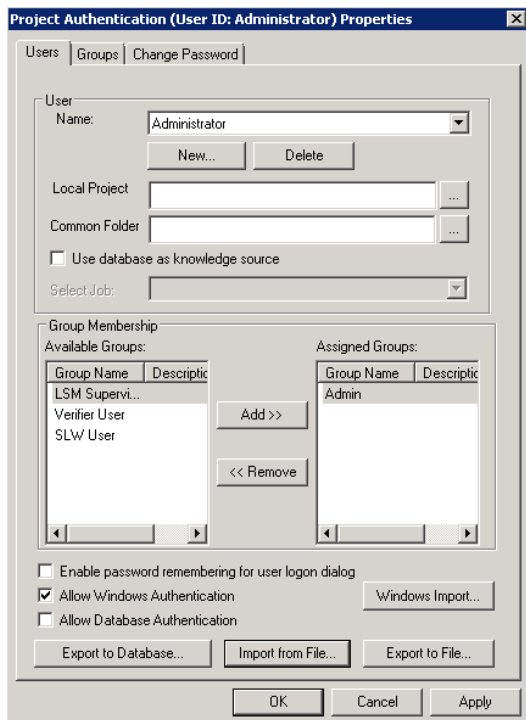


Figure 24 Perceptive Intelligent Capture Project Security

When using Database Authentication in Verifier, access rights have to be granted to the verifier user.

By default, this should be:

- Read and Write to all database tables
- Execute rights to stored procedures and functions.

File System Security

Although Perceptive Intelligent Capture does provide application-level security, the product relies on integrated Windows file system security built into the underlying operating system for file system access.

Perceptive Intelligent Capture uses operating system files, such as SDP, DAT, and WDC, to store all application and project data. A combination of shared and NTFS permissions are used to protect application data.

NTFS file and folder permissions are used to control the type of access that a user, group, or application has to folders and files. This includes everything from reading the contents of a folder or a file to modifying a folder’s contents and/or executing individual files. There are five basic NTFS file and six folder permissions:

File Permission	Access Granted
Read	Allows the user or group to read the file and view its attributes, ownership, and the permissions set.
Write	Allows the user or group to overwrite the file, change its attributes, view its ownership, and view the permissions set.
Read and Execute	Allows the user or group to run and execute the application. In addition, the user can perform all duties allowed by the Read permission.
Modify (CHANGE)	Allows the user or group to modify and delete a file including performing all of the actions permitted by the Read, Write, and Read and Execute NTFS file permissions.
Full Control	Allows the user or group to change the permission set on a file, take ownership of the file, and perform actions permitted by all of the other NTFS file permissions.

Folder Permission	Access Granted
Read	Allows the user or group to view the files, folders, and subfolders of the parent folder. It also allows the viewing of the folder attributes, ownership, and permissions.
Write	Allows the user or group to create new files and folders within the parent folder, view folder ownership and permissions, and change folder attributes.
List Folder Content	Allows the user or group to view the files and subfolders contained within the folder.
Read and Execute	Allows the user or group to navigate through all files and subfolders, and to perform all actions allowed by the Read and List Folder Contents permissions.
Modify (CHANGE)	Allows the user to delete the folder and perform all activities included in the Write and Read & Execute NTFS folder permissions.
Full Control	Allows the user or group to change permissions on the folder, take ownership of it, and perform all activities included in all other permissions.

The difference between NTFS file and folder permissions is the “List Folder Contents NTFS” folder permission. NTFS folder permissions enable system administrators to limit a user’s ability to browse through a tree of folders and files. This is useful for securing a specific directory such as an application directory. A user must know the name and location of a file to read or execute it when this permission is applied to its parent folder. However, in a Perceptive Intelligent Capture environment, client applications in the product suite, instead of Windows Explorer, are used to process project data. The intent of file and folder permissions is to minimize the probability of accidental or malicious data destruction.

Shared permissions serve for purposes similar to NTFS permissions: They help protect files from unauthorized access. If you are a member of the Administrators or Power Users group, you can share folders on a local computer so that users on other computers can access those folders over the network. By assigning shared folder permissions to any shared folder, you can restrict or allow access to those folders over the network. Use NTFS folder permissions if the shared folder is located on a NTFS drive. NTFS permissions are effective on the local computer and over the network.

For more information regarding folder permissions, reference [0](#).

Access to Project Data

Perceptive Intelligent Capture uses a hierarchical file structure to store project-related data. The project directory is at the highest level of this structure.

All Perceptive Intelligent Capture components (including services, applications, license engine, and users) need appropriate access rights to the project directory and all of its subfolders.

See section [File System Security](#) for details on how to enable access to project data.

Once Perceptive Intelligent Capture has been installed, configured, and prepared for production, appropriate file access security should be applied to the project directory before releasing the implementation to the general user community. A correct application of file access security can prevent unauthorized access to project data while granting access to authorized users.

To apply file access security to the Perceptive Intelligent Capture project directory, consider the following guidelines.

1. Launch Windows Explorer on the Perceptive Intelligent Capture server (or the server containing the project directory).
2. Locate the project folder, right-click the folder name, and select *Properties*.
3. In the *Properties* dialog box, go to *Sharing* tab.
4. Click *Share this folder*.
5. In the *Share* name field, type a name for the share.
6. Click *Permissions*. In the *Share Permissions* dialog box, complete the following tasks, and then click **OK**.
 1. Add the local Perceptive Intelligent Capture group with *Full Control* permission
 2. Add the local Perceptive Intelligent Capture Users group with *Change* permission
 3. Add the local Administrators group with *Full Control* permission
 4. Remove the *Everyone* group
7. Go to *Security* tab. Complete the following tasks and click **OK** when finished
 1. Add the local Perceptive Intelligent Capture group with *Full Control* permission
 2. Add the local Perceptive Intelligent Capture Users group with *Change* permission
 3. Add the local Administrators group with *Full Control* permission
 4. Remove the *Everyone* group

Note The Perceptive Intelligent Capture and Perceptive Intelligent Capture Users groups are local groups. The Perceptive Intelligent Capture local group should be created on all Perceptive Intelligent Capture servers and RemoteAdmin machines; the Perceptive Intelligent Capture Users local group is only

required on the Perceptive Intelligent Capture server storing the project data. For an explanation of these groups, see next section.

Accounts and File Access Security

Access to project data in a Perceptive Intelligent Capture implementation should be granted using a combination of Discretionary Access Control (DAC) and Role-based Access Control (RBAC).

The Discretionary Access Control model allows the owner of objects or resources (in this context, a System Administrator) to control who accesses them and what operations they can perform. For example, a System Administrator who creates a share called “Projects” to hold data pertaining to a particular Perceptive Intelligent Capture project can control and dictate (per the organization’s security policy and business rules) who can access the items within the share.

The Role-Based Access Control model, also referred to as a non-discretionary model, makes access decisions based on the rights and permissions granted to a role or groups, instead of an individual. In this model, System Administrators create roles (or groups), and then assign rights and permissions to the role (or group) instead of directly to a user; users are then placed into a role (or group) and inherit the rights and permissions assigned to the role (or group).

The following table lists the recommended groups and accounts that should be created for each implementation of Perceptive Intelligent Capture:

Group/Account Name	Purpose
Perceptive Intelligent Capture ProjectUsers	Global group containing all users designated as a Perceptive Intelligent Capture project designer and/or data verifier within an organization.
Perceptive Intelligent Capture Admin	Global group containing all users designated as a Perceptive Intelligent Capture System Administrator within an organization. This group should be added to the local Perceptive Intelligent Capture group on all RTS servers and RTS Remote Admin workstations.
Perceptive Intelligent Capture	Local group used to grant access to local Perceptive Intelligent Capture resources; the Perceptive Intelligent Capture Admin global group should be added to its membership. Create this group on all Perceptive Intelligent Capture Server and RemoteAdmin machines
Perceptive Intelligent Capture Users	Local group used to grant access to the project directory. Add the global group Perceptive Intelligent Capture ProjectUsers to its membership. Create this group on the Perceptive Intelligent Capture server housing the project directory.
Perceptive Intelligent Capture RTSSvc	Service account used to start the Perceptive Intelligent Capture Service Manager. This user should be a member of the Perceptive Intelligent Capture Admin global group and the local Administrators group on all Perceptive Intelligent Capture servers and Remote administration machines.

The following table lists the groups and accounts, assigned permissions, and the folders/objects on which the permissions should be applied for each implementation of Perceptive Intelligent Capture:

Group/Account Name	Permission Type: Shared	Permission Type: NTFS	Folder/Objects Assigned On
Perceptive Intelligent Capture	Full Control	Full Control	C:\Program Files\ [company]\ [ProjectName]
Perceptive Intelligent CaptureUsers	Change	Modify	C:\Program Files\ [company]\ [ProjectName]

For a comprehensive list of security settings and options, see [0](#).

Configure the Service Account for Perceptive Intelligent Capture

Run Perceptive Intelligent Capture on a Domain Network

Perceptive Intelligent Capture Runtime Server Service utilizes a Windows Service which runs in the Server background. This Service manages the operation of Runtime Server Instances, and processing of documents automatically.

When running Perceptive Intelligent Capture on multiple servers located on a Domain Network, it is recommended that the Perceptive Intelligent Capture Runtime Server Service is assigned a Domain user against the Windows Service. This will allow Perceptive Intelligent Capture to communicate with all servers running the service across the Domain.

The Service Account used in Perceptive Intelligent Capture is also given permission to any file/folder shares across the servers to allow the Perceptive Intelligent Capture Runtime Server service access to all project related files.

System Monitoring

The System Monitoring service is used to send email notification to selected users to notify of any errors, or warnings, that any Runtime Server instance may raise during its operation.

The Service User Account used for System Monitoring should have sufficient rights to be able to send emails on the server and Domain.

Email Import and Service User Accounts

Perceptive Intelligent Capture provides the ability to perform email importing, automatically downloading emails from a Mail Box account and importing it into the Perceptive Intelligent Capture system. The Perceptive Intelligent Capture Runtime Server Service must have sufficient access rights to be able to access the mailbox and download emails for process.

Configure Runtime Components

Once you install Perceptive Intelligent Capture you must configure the Runtime Service Manager before you can use the application.

Before Configuring Components

Check the following pre-installation steps before you configure Runtime Components.

Before starting the Perceptive Intelligent Capture Runtime Service Manager on a license server (a machine equipped with a hardware-key intended to provide a shared network copy of the license file to other Perceptive Intelligent Capture machines) or a standalone machine (laptop or an autonomous Perceptive Intelligent Capture machine), ensure that:

- A hardware key is installed
- The corresponding license file for the installed hardware key is copied to the ...\\Perceptive\\Components\\Cairo directory
- The demo license file, zCroDemo.lic, is deleted from the ...\\Perceptive\\Components\\Cairo directory

Configure the Runtime Service Manager

Below are the steps required for configuring the Runtime Service Manager. Administrator rights are needed to complete these steps.

1. Click **Start** on the lower left of your screen.
2. Click **Run**.
3. At the command window, type `services.msc` and press **Enter**.
4. In the **Scope** panel, double-click the Perceptive Intelligent Capture Runtime Service Manager.
5. On the **General** tab, under **Startup type**, select **Automatic** from the drop-down list.
6. Click the **Log On** tab.
7. Under **Log on as**, select **This account**.

8. Click **Browse**.
9. Find and add the domain user with appropriate and sufficient processing network access rights for Perceptive Intelligent Capture (such as Perceptive Intelligent Capture RTSSvc), and then click **OK**.
10. Type the domain password for the user in the fields provided.
11. Click **Apply** and **OK** and close the Computer Management MMC.

Configure the RTS RemoteAdmin MMC Snap-in

The installation of Perceptive Intelligent Capture creates a default console, called Perceptive Intelligent Capture Service Manager that you can use to configure the Perceptive Intelligent Capture RTS RemoteAdmin MMC snap-in.

Very Important!

Before configuring the RemoteAdmin MMC snap-in, make sure that the steps outlined in section **Configure the Runtime Service Manager** have been performed and the Runtime Service Manager is started. Unless the service has been started, the MMC will not connect to the machine.

1. Launch the Perceptive Intelligent Capture Service Manager MMC snap-in by selecting **Start > Programs > Perceptive>Perceptive Intelligent Capture > Perceptive Intelligent Capture Runtime Service > Management Console** on the desktop of the target machine. The Perceptive Intelligent Capture Service Manager MMC console appears.

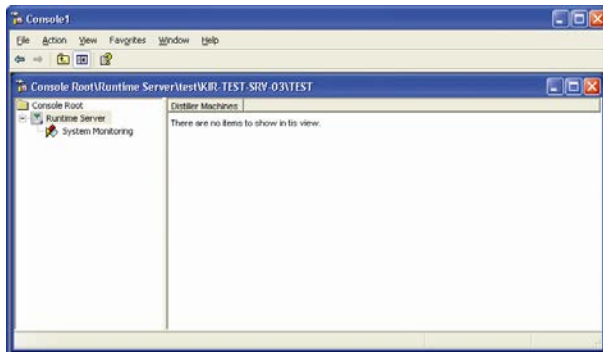


Figure 25: The administration console

2. Right-click the Perceptive Intelligent Capture Runtime Server node and select **New Perceptive Intelligent Capture RTS Group** from the context menu.
3. On the **New Group** dialog, type a group name and click **OK**.
4. Expand the Perceptive Intelligent Capture Runtime Server node, right-click the group you created, and then select **New Machine**.

5. In the **Domains** drop-down list, select the domain where the machine being configured locates.

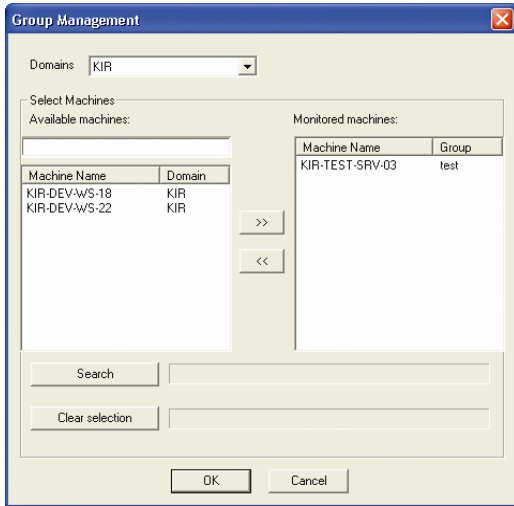


Figure 26: Group management of runtime service

6. On the **Group Management** dialog box, type the name of the Perceptive Intelligent Capture server and click **OK**.

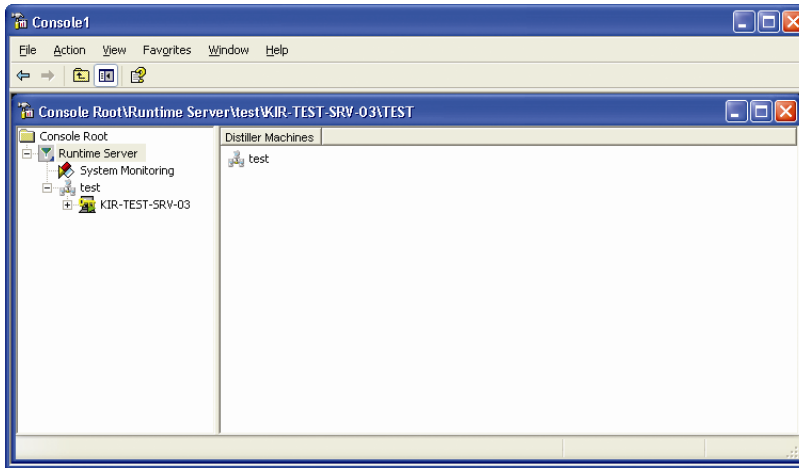


Figure 27: Administration console with added machine

7. Right-click the machine name. Select **License**, and set the license path.

8. Right-click the machine name and select **New > RTS Instance**
9. On the New RTS Instance dialog, type the instance name and then click **OK**. The configuration for RTS RemoteAdmin MMC snap-in should look like the example in [FIGURE 28](#).

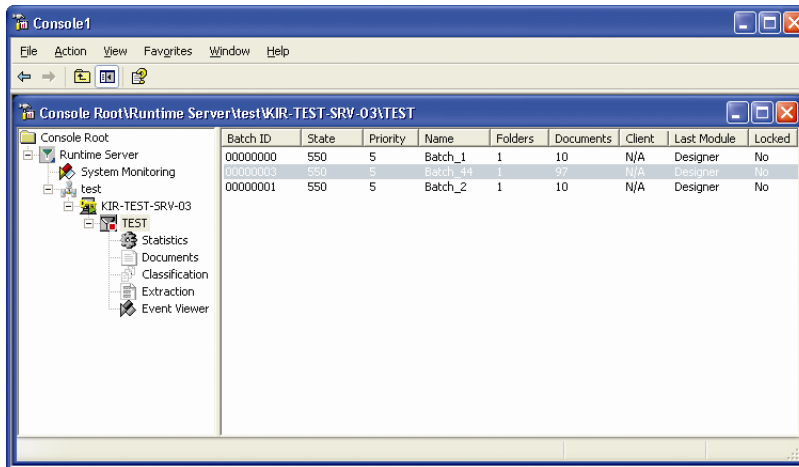


Figure 28: Administration console with instance

For information on how to configure project settings for a Perceptive Intelligent Capture instance, see the *Perceptive Intelligent Capture Runtime Server User's Guide*.

Configure E-mail Import

Below are the steps required to configure the E-mail Import feature for Microsoft Office 2003. They may be slightly different for other versions of Microsoft Office.

1. Launch the **Windows Control Panel** and select the **Mail** option
 - Note** Microsoft Outlook must be installed before this option appears in the Control Panel.
2. Click **Show Profiles**. Click **Add**, create a new profile named **RTS_Import**, and click **OK**.
3. Select **Add a new E-mail account** and click **Next**. Select **Microsoft Exchange Server**.
4. Enter the name of your Microsoft Exchange Server. Switch off **Use Cached Exchange Mode**. Enter the **User Name** and click **Next** to make sure that mailbox is recognized.
5. Click **Next** then click **Finish** to create the account and close the wizard.
6. Open the **.\Perceptive\Perceptive Intelligent Capture** folder in Windows Explorer and create a batch file containing the following line: **DstHost.exe /TestMailUI**. Run the batch file. The Outlook logon screen should appear.
7. Enter **[your domain name]\[your user name]** as the user name and your password. Check the **Remember password** option otherwise your RTS service may not work.
8. Open the latest **I_YYYYMMDD_Perceptive Intelligent Capture RuntimeServiceHost_PID.log** file in the **.\Perceptive\Perceptive Intelligent Capture\Log** folder and verify whether the login was successful by checking for the message: Managed to open the folder Inbox or any corresponding errors.

9. Create and run another batch file containing the following line: **DstHost.exe /TestMail**. You should get the same message in the log file as in the previous step, such as, Managed to open the folder 'Inbox', but without any dialog box prompting you for the user name and password.
10. See the Perceptive Intelligent Capture **Runtime Server Guide** to complete the configuration process.

Advanced Logging

The standard Runtime Server Log includes System Level Resource information and, in the event of a system crash or failure, special error logs.

System Resource Logging

In the Perceptive Intelligent Capture\bin\Log folder, the log files for the different Perceptive Intelligent Capture components can be found as following:

- V_ log file for Verifier messages, e.g. any custom script errors would be logged there.
- H_ log file for Runtime Server messages.
- VA_ log file for Advanced Verifier messages.
- L_ log file for Learnset Manager messages, e.g. when the user triggers document learning, or when a backup of the Learnset is taken, etc.
- D_ log file for Designer messages (including scripting errors).
- U_ log file for Unknown/External application messages.
- S_ log file for Standard Service Manager messages.
- The I_ log files are component log files for all applications and are written to by the application during the normal running.

Examples for file name syntax, e.g. for the Runtime Server log file:

[Application directory]\bin\Log\H_<instance name>_yyyymmdd.log

For example:

C:\Program files\Perceptive\Perceptive Intelligent Capture\bin\Log\H_Test_20100203.log

Standard Service Manager log file:

[Application directory]\bin\Log\S_yyyymmdd.log

For example:

C:\Program files\Perceptive\Perceptive Intelligent Capture\bin\Log\S_20100203.log

The following System Resource information has been added to the log files.

- Available physical memory (in kb).
- Used physical memory (in kb).
- Available virtual memory (in kb).
- Used virtual memory (in kb).
- Virtual memory used by this RTS host instance process (in kb).

- Physical memory used by this RTS host instance process (in kb).
- Handles used by the process (in number of handles).
- GDI resources used by the process (in number of handles).
- User Objects used by the Process (in number of Objects).

Using the following format:

Entry Nr.	Entry Description
1	Type of message (info, warning, error, etc)
2	Severity of message
3	Time logged
4	Process ID (PID)
5	Overall used/available physical memory
6	Overall used/available virtual memory
7	Used physical/virtual memory by this Runtime Manager
8	Process handles used by this Runtime Manager
9	GDI resources/UserObjects used by this Runtime Manager
10	Message Description

S_log example:

```
[Info] |30| 00:35:26.146 | 2628 | 2663792k/14110392k | 2983264k/24429476k | 51660k/18932k | 154 | 4/14 | Sent '13' to Host '5.2FullSetup-RTS' Conn: 1
```

H_log example

```
[Info] |20| 01:00:57.656 | 5584 | 1005944k/15768240k | 1097012k/26315728k | 8276k/7004k | 84 | 4/5 | Username: SYSTEM, Computername: WIN-RSL5FCPK7A4
```

Crash / Failure Logging

In the case of a System or Application Crash or Failure an additional error log file will be created with a format:

C_<Process ID>_yyyymmdd.log

This will log crashes under the following circumstances.

- Import Crashes - The log file will have stack information specific to the status of the system when the crash/failure occurred.

- OCR Engine Crashes - The log file will have a "ReadZone" entry for the specific OCR engine for which the crash occurred and stack information specific to the status of the system when the crash/failure occurred.
- Classification Engine Crashes - The log file will have a "Classify" entry for the specific Classification engine for which the crash occurred, the specific Class name where the crash occurs, and stack information specific to the status of the system when the crash/failure occurred.
- Extraction Engine Crashes - The log file will have an "EvalZone" entry for the specific Extraction engine for which the crash occurred, the field where the crash occurs, and stack information specific to the status of the system when the crash/failure occurred.
- Export crashes - The log file will have a "StepExport" and stack information specific to the status of the system when the crash/failure occurred.
- Clean-up crashes - The log file will have a "ProcessDocumentsCleanUp" and stack information specific to the status of the system when the crash/ failure occurred.
- Script Events - The name of the script event, which could be project level or a certain class. For script events on field level, the field name will be added to the crash/failure log.

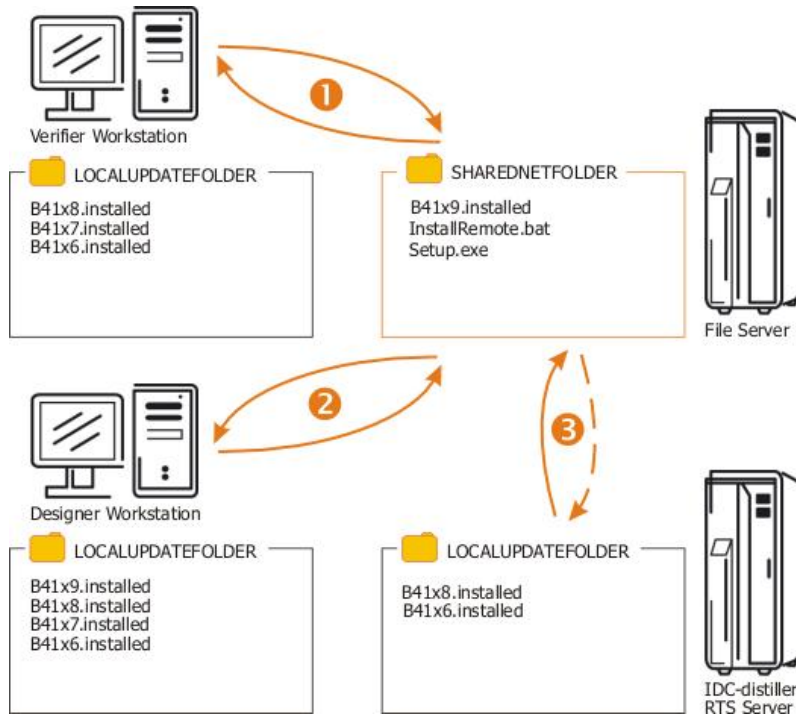
Auto-Update

Description

How the Automatic Update Works

The auto update feature allows the Administrator to update automatically Perceptive Intelligent Capture software versions with latest available service updates on different workstations where Perceptive Intelligent Capture applications are running. For this purpose, it is required to set up a "Shared Network Folder" where the new service updates are to be placed.

The workstations must have sufficient file access permissions to access this shared directory.



Furthermore, a Local Update Folder has to exist for each workstation, where automatic updates are to be configured. Through this directory, the system will check which software builds have already been installed.

There are three files to be copied to the Shared Network Folder to enable automatic updates:

- One system file (called "Build Level" file for further reference) identifies the build level of the service update to deploy automatically (for example, "B4117.installed").
- The service update to deploy automatically. (It is recommended to define a unique name associated with execution of service update installations, for example "Setup.exe".)
- One batch file for execution of the service update in Silent Mode ("InstallRemote.bat").

When starting the Verifier (or Designer/RTS applications) the batch file checks whether the same "Build Level" file located in the "Shared Network Folder" is already available in the Local Update Folder.

1. If this is not the case, the "InstallRemote.bat" is invoked. After completion of the silent installation, the "Build Level" file from the Shared Network Folder is going to be copied to the Local Update Folder directory and the Verifier (or the other desired application) is going to be started.
2. In case the same "Build Level" file is already available in the Local Update Folder, the silent update step is going to be skipped and only the launching of the application is going to take place.
3. To auto-update the Runtime Server (RTS) software version, the RTS service has to be stopped first. It is recommended to apply this operation when the RTS is not loaded with the document processing activities. For this purpose the Windows "Winat" function can be used, which can be configured as follows.
 - Stop the RTS service at the specific desired time (e.g., via usage of the "Stop RTS running as NT Service.bat" from the application directory of Perceptive Intelligent Capture).
 - Start the auto-update feature (the file "AutoInstall.bat" from the Perceptive Intelligent Capture application directory contains all required instructions).

Note The enclosed file paths have to be adjusted manually.

- Start the RTS service at the desired time (e.g., via usage of the "Start RTS as NT Service.bat" from the application directory of Perceptive Intelligent Capture).

The used batch files are going to be created during the full setup installation of Perceptive Intelligent Capture. In case the Auto Update feature was not configured during the installation, the used file paths have to be entered/adjusted in the following batch files (after the installation): "StartIfNotInstalled.bat", "AutoInstall.bat". To enable the auto update feature for the Verifier and Designer applications, they have to be started via the corresponding "DstVer_AutoUpdate.bat" (or "DstDsr_AutoUpdate.bat") from the Perceptive Intelligent Capture application directory.

Configure Auto Update in Perceptive Intelligent Capture Setup

During the Perceptive Intelligent Capture 5.6 installation, the setup will show a dialog box for configuring of the Auto Update feature.

To configure the auto update during the installation, the Shared Network Folder path has to be known before launching the Perceptive Intelligent Capture setup. The administrator can also activate the automatic update for Verifier and/or Designer applications using the corresponding Designer and Verifier check-box controls available in the dialog (by default, both are deactivated).

The options have the following implication:

Activation of Designer and/or Verifier options: The program shortcuts do not call the corresponding application directly any longer. Instead they use the generated (by the setup) batch files "DstDsr_AutoUpdate.bat" and/or "DstVer_AutoUpdate.bat" correspondingly.

Note These options can be activated only if the entered "Shared Network Folder" path is valid.

Entering of the Shared Network Folder path: The setup will use this path when generating the batch files for auto update function (See section [How the Automatic Update Works](#) above).

Manual Configuration of the Auto Update Function

In case the Auto Update feature was not properly configured during the Perceptive Intelligent Capture 5.6 installation (for example, due to the reason that exact location of the Shared Network Folder was unknown at the point of the installation), it is still possible to configure it manually afterwards. The following steps are going to be required.

Edit the "AutoInstall.bat" Batch File

The path Shared Network Folder has to be entered in the "AutoInstall.bat". For this purpose, edit the "AutoInstall.bat" batch file using, e.g., Windows Notepad application (right-click the "AutoInstall.bat" file in Windows Explorer, select *Edit* menu item).

```
@echo off

REM
=====
==
REM This Batch file checks the Shared Network Install folder ("SHAREDNETFOLDER" variable) for available
REM software service updates.
REM Please adjust the "SHAREDNETFOLDER" variable with your network path, where new service updates are
REM going to be placed for automatic installation by Verifier and/or Runtime Service workstations.
REM
```



```
REM Example: \Your File Server\Your Perceptive Intelligent Capture Service Update Share
REM
REM "ACTIVEDIR" variable: Location of this batch file (generated automatically by the Perceptive
Intelligent Capture setup).
REM
REM (c) 2008 Perceptive Software, Inc.
REM
=====
==
SET SHAREDNETWORKFOLDER = "\\YourNetworkInstallServerName\YourInstallShareName"
SET ACTIVEDIR = "C:\Programme\Perceptive\Perceptive Intelligent Capture"
IF EXIST %SHAREDNETWORKFOLDER %\*.installed GOTO NEW_SU
echo no.updates.available.root
GOTO END
:NEW_SU
CD %SHAREDNETWORKFOLDER %
for %%1 in (*.installed) do Call %ACTIVEDIR %\StartIfNotInstalled %%1 %SHAREDNETWORKFOLDER % %ACTIVEDIR %
CD %ACTIVEDIR %
:END
```

Change the content of the variable "SHAREDNETWORKFOLDER" to the network location of the new service updates that is going to be used as the master location of the software setups for Auto Update feature.

Change Shortcuts

The shortcuts used to start Designer and/or Verifier applications (Available in Windows Start menu and/or on the desktop) invoke the corresponding programs directly, in case the Auto Update function was not configured during the setup.

To adjust this, replace the target file "DstDsr.exe" (or "DstVer.exe" for the Verifier application's shortcut) with the batch file DstDsr_AutoUpdate.bat" (or "DstVer_AutoUpdate.bat") in the *Properties* of the corresponding application's shortcut (Right-click the shortcut and select the *Properties* menu item).

Usage

The Auto Update feature can be used for automation of the Perceptive Intelligent Capture installation process and can save time in administration efforts to deploy future software update on, e.g., 100 different production developments, and testing workstations and servers where Perceptive Intelligent Capture is running.

Enable Additional OCR Engine Languages

Perceptive Intelligent Capture supports many OCR engine languages. The FineReader engines support Asian languages such as Japanese, Chinese, Thai, and Korean. The main languages, English, French, German, Spanish, and Italian are enabled by default, but for some OCR engines you can request additional recognition languages at Perceptive.

Perceptive will confirm that the requested language is effectively supported by the desired OCR engine and will deliver special custom language files in this case.

To Enable a Language for an OCR Engine

A language can only be processed by Perceptive Intelligent Capture if it is installed on the server machine, and if it is present in the FineReader directory:

1. Exit all Perceptive Intelligent Capture applications.
2. On the Perceptive Intelligent Capture servers, stop the Perceptive Intelligent Capture Runtime Server services.
3. Copy the custom language file(s) received from Perceptive to the .\Langfile sub-folder on your local system.
4. Copy the language file to the appropriate FineReader folder:
5. for instance: .\ Perceptive\Components\Cairo\Finereader10 on all configured Perceptive Intelligent Capture machines.
6. Restart the Perceptive Intelligent Capture Runtime Server services.
7. Restart the client application.

Note If not already done, you first have to enable the support of double byte and extended ASCII character sets, (Greek, CJKT, Russian, Hebrew) for your system. The steps depend on your operating system.

To add Input Language for Windows 7

1. Select **Start > Control Panel > Clock, Language, and Region > Region and Language**.
2. Click the **Keyboards and Languages** tab.
3. Click **Change keyboards**.
4. Under **Installed services**, click **Add**.
5. Double-click the language you want to add, double-click **Keyboard**.
6. Select the text services options you want to add.
7. Click **OK** to confirm.

To add Input Language for Windows XP

1. Select **Start > Control Panel > Language and Regional Options**.
2. Select the **Languages** tab.
3. Check the two check boxes for Supplemental language support.
4. Click **Apply**.
5. Reboot the machine.

To add Input Language for Windows Vista

1. Select **Start > Control Panel > Clock, Language, and Region > Regional and Language Options**.
2. Click the **Keyboards and Languages** tab.
3. Click **Change keyboards**.
4. Under **Installed services**, click **Add**.

5. Double-click the language you want to add, double-click the text services you want to add.
6. Select the text services options you want to add.
7. Click **OK** to confirm.

To add Input Language for Windows 2008

1. Select **Start > Control Panel > Regional and Language Options**.
2. Click the **Keyboards and Languages** tab.
3. Click **Change keyboards**.
4. Under **Installed services**, click **Add**.
5. Double-click the language you want to add, double-click the text services you want to add.
6. Select the text services options you want to add.
7. Click OK to confirm.

To add Input Language for Windows 2003

1. **Select Start > Control Panel > Regional and Language Options**.
2. Select the Languages tab.
3. Under Supplemental language support, check the two check boxes.
4. Click OK or Apply.
5. Reboot the machine.

Use Perceptive Intelligent Capture Licenses

To use Perceptive Intelligent Capture, you must have a runtime license. The license is stored in a file with the extension *.lic. This file is located in the \Components\Cairo directory of the Perceptive Intelligent Capture installation. The license file can be updated incrementally as new components are purchased.

To check the current license status, use SCBLibVersion.exe (... \Components\Tools). From the menu, select View>Components Licensing Info to display a list of valid licenses.

Only licensed options are available in Perceptive Intelligent Capture.

The Perceptive Intelligent Capture installation contains a demo license file, ZcroDemo.lic, which is valid for several weeks. When you receive your permanent license, copy the *.lic file to the license path and remove the demo license file.

Perceptive's licensing model uses a combination of a license file and a corresponding hardware key. For a standalone installation, the hardware key can be attached to a local machine that contains both the server and client components of the Perceptive Intelligent Capture product suite.

The Perceptive licensing model is designed for a distributed client/server environment where scalability is paramount. In this type of environment, a machine designated as the license server houses both the hardware key and the original license file. The server generates a centrally located network license file that is used by all other servers and clients that are part of the Perceptive Intelligent Capture implementation.

For more information on the Perceptive Intelligent Capture licensing model, refer to the *Product Licensing Guide* on the installation CD. The document can also be found on the installation folder path ...\\Perceptive\\Perceptive Intelligent Capture.

Appendix A Web.Config Options and Associated Resource File Parameters

The table below contains some items which can be modified in the Web.Config with regards to enabling/disabling/customizing certain features.

Option	Default Value	Description
ADOCommandExecutionTimeOut	Web Verifier	Optional attribute. Timeout in seconds for database stored procedures execution. If not specified timeout from database connection string is used. <client ADOCommandExecutionTimeOut=10></client>
AllowAccessToDocumentsToIndexOnly	false	This option controls whether navigation is enabled only for documents for indexing (those with states from enabled workflow input states). This option only takes effect when "Disable navigation to valid documents" is set to <i>True</i> in settings. When set to <i>False</i> (or not included in web.config) WVC works as before allowing navigation to out-of-workflow documents.
assembly		Note This attribute is not configurable. Required attribute. Assembly contains custom user provider class. <user.controller> <userProvider.assembly="Brainware.Verifier.WebClient" ... </user.controller> Required attribute. Assembly contains custom logger provider class. <system.logger> <userProvider.assembly="Brainware.System.Logger" ... </system.logger>

Option	Default Value	Description
batchColumnVisibility	Web Verifier	<p>Configuration of additional columns in the Batch View:</p> <p>Setting this attribute to true will display the External Group ID batch column in WVC</p> <pre>externalGroupIdColumn visible="true"/</pre> <p>Setting this attribute to true will display the External Batch Name column in WVC</p> <pre>externalBatchNameColumn visible="true"/</pre> <p>Setting this attribute to true will display the Transaction ID batch column in WVC</p> <pre>transactionIdColumn visible="true"/</pre> <p>Setting this attribute to true will display the Transaction Type batch column in WVC</p> <pre>transactionTypeColumn visible="true"/</pre>
BatchViewPageSize	20	<p>The number of batches to display on Web Verifier in the batch list. Any batches exceeding that count are divided into other navigation pages.</p> <p>The default value is 20, allowing for up to 20 batches to be shown in the Web Verifier batch list.</p> <p><u>Example</u></p> <pre><add key="BatchViewPageSize" value="20"/></pre>
cacheSize		<p>A parameter in the web.config that allows users to specify the number of documents to cache when working on a batch of documents. Document pre-loads workdoc objects to speed up opening of next documents within the batch.</p> <p>Within the web.config file, set the value for the cacheSize property within the <system.controllers></document.controller></document> section.</p> <pre><document cacheSize="10" maxPagesToPreload="4"></pre> <p>It is not possible to disable the pre-loading feature, but it is possible to minimize the number of pre-loaded documents to 2: one current and one pre-loaded.</p>

Option	Default Value	Description
class		<p>Required attribute. Custom user provider.</p> <pre data-bbox="695 489 1370 625"><user.controller> <userProvider.class="Brainware.Verifier.WebClient.Core.WebUserProvider" ... </user.controller></pre> <p>Required attribute. Custom logger provider.</p> <pre data-bbox="695 730 1370 867"><system.logger> <userProvider.assembly="Brainware.System.Logger.LoggerFactory" ... </system.logger></pre>
connectionStrings		<p>Configuration connects to database.</p> <pre data-bbox="695 1035 1299 1171"><connectionStrings> <add name="Entities" connectionString="..." providerName="System.Data.EntityClient" /> </connectionStrings></pre>
DocumentViewPageSize	4	<p>The number of folders to display in the Document Tree view, when selecting <i>Show Selected Batch</i>. The default value, 4, denotes 4 folders to display in <i>Show Selected Batch</i> view; any additional batches are shown in subsequent navigation panels.</p> <p><u>Example</u></p> <pre data-bbox="695 1461 1312 1486"><add key="DocumentViewPageSize" value="4"/></pre>
EnableProfiler		<p>Enables the Web Verifier profiler.</p> <pre data-bbox="695 1608 1370 1633"><add key="EnableProfiler" value="true false" /></pre> <p>The profiler collects and records time taken by user actions such as commands and their internal sub-operations.</p>

Option	Default Value	Description
formEvents		<p>Required attribute. Enable/disable focus changed event on fields on the Verification view.</p> <pre><focusChanged enabled="true false"/></pre> <p>Controls firing of FocusChanged event on Enter key press in a field. Defaults to true, if web.config does not have this setting, it is considered to be turned on. This setting has no effect on FocusChanged event in case <mouseClicked> is set to true.</p> <p>Required attribute. Enable/disable mouse click event on fields and table on the Verification view in Indexing mode.</p> <pre><mouseClicked enabled="true"/></pre> <p>Required attribute. Enable/disable tabPressed event on fields and table on the Verification view in Indexing mode.</p> <pre><tabPressed enabled="true"/></pre> <p>Required attribute. Enable/disable itemCopied event.</p> <pre><itemCopied enabled="true"/></pre> <p>Required attribute. Enable/disable table cell select event.</p> <pre><tableCellSelected enabled="true"/></pre>
httpHeaderBasedSso		<p>Enables the Single Sign-On (SSO) user authentication using an httpHeader sent by an SSO service. The header value contains the SSO authenticated user name..</p> <p>This parameter is used by the SSO service to send logged in user name.</p> <p>enabled="true": setting the enabled attribute to true enables the Web Verifier SSO feature.</p> <p>Note On a system using standard authentication the "enabled" setting should be set to 'false'.</p> <p>loginHeader="login" – the loginHeader value corresponds to the HTTP header attribute name that contains the SSO authenticated user.</p> <p>Example:</p> <pre><httpHeaderBasedSso loginHeader="remoteUser" enabled="true"/></pre>
inactiveUserTimeout		<p>Required attribute. It is not used to control user session timeout. The user session timeout is controlled by the <sessionState Timeout> parameter.</p>

Option	Default Value	Description
inspectionServerTimeout		<p>Required attribute. Time of the periodical ping the IIS server by the process in separate mode.</p> <pre data-bbox="695 472 1369 611"><system.project> <project.inspectionServerTimeout = "00:00:20" ... </system.project></pre>
inspectionTimeOut		<p>Required attribute. It is not used to control user session timeout. The user session timeout is controlled by the <sessionState Timeout. parameter..</p>
instanceName	Web Verifier	<p>The name of the Web module that will be shown to have access the batch list.</p> <p><u>Example</u></p> <pre data-bbox="695 1003 1341 1031"><client instanceName="Web Verifier"></client></pre>
LanguageDisplayName_[ISO]		<p>This optional set of keys is located in the <appSettings> section of the web.config file.</p> <p>The [ISO] part of the key needs to be replaced by the three letters name of the folder in the Web Verifier resources folder.</p> <p>This key can be used to customize the language display names of the language selection drop-down menu.</p> <p>Example</p> <p>To display the correct string for Simplified Chinese, the following should be added:</p> <pre data-bbox="695 1434 1369 1493"><add key="LanguageDisplayName_ZHO" value="中文简体" /></pre> <p>Note As soon as this parameter is defined it will override the system language name.</p>

Option	Default Value	Description
licensePath	"C:\My Shared License\Runtime.lic"	<p>The location of the shared license file, reference documentation regarding configuration. This should point to the License Share file.</p> <p><u>Example</u></p> <pre><project licensePath="C:\My Shared License\Runtime.lic" mpdDistance="19" mpdThreshold="60" /></pre>
loadInSeparateProcess	True	Required attribute. Read only. The value is 'True' only.
maxPagesToPreload		<p>This setting defines the number of pages to be pre-loaded for a document.</p> <p>According to the settings made, the following actions will be triggered on page images in the background when a document is loaded:</p> <ul style="list-style-type: none"> • Pre-loading • Converting to JPEG • Saving to the database <pre><document cacheSize="10" maxPagesToPreload="4"></pre> <p>First and last pages are always pre-loaded, remaining cache slots are filled with pages that have field candidates starting from the lower index.</p>
pathToProjectExe	"BW \ Perceptive Intelligent Capture \ bin\"	<p>The location of the Perceptive Intelligent Capture Designer module (DstDsr.exe).</p> <p><u>Example</u></p> <pre>pathToProjectExe="C:\Program Files\Perceptive\Perceptive Intelligent Capture\bin\"</pre>

Option	Default Value	Description
priority	ERROR	<p>Set this attribute to identify tracing level. Options are,</p> <ul style="list-style-type: none"> - DEBUG: Full tracing of information and errors. - ERROR: Errors only. <p><u>Example</u></p> <pre><priority value="ERROR"/></pre>
reinitScript	True	<p>By default, this attribute is always set to true. This will recover the script engine whenever a script error occurs in Web Verifier application.</p>
remoteObjectRenewalTimeout	60	<p>Optional attribute. Remote object references are renewed at this time period (in seconds). Defaults to 60. Minimum accepted value is 30. The lower the number the faster unused objects free memory but this can lead to errors for long running commands. One can increase this value if some actions (i.e. field validation) take a while to finish with remoting error.</p> <p>Note This value should be set in both web application config file and Brainware.System.Project.exe config file</p> <pre><client remoteObjectRenewalTimeout=45></client></pre>
sessionHeader	headerName	<p>Name of the HTTP header used by the SSO service to send its user session ID.</p> <p>This is SSO service dependent.</p> <p><u>Example</u></p> <p>headerName is "ShibSessionId" for a Shibboleth provider.</p>
sessionState Timeout	20	<p>The sessionState Timeout parameter controls the timeout for a user session. The value represents the number of minutes that a user is allowed to be inactive before the session is ended.</p> <p>Note Session timeout should be set to a value less than that of the SSO session. Refer to the product documentation of your SSO provider for details how to configure the SSO session duration.</p>

Option	Default Value	Description
ShowExtendedErrorMessages	True	<p>Set this attribute to true to enable stack trace information in the error messages appearing in Web Verifier. Messages are written to the Trace Log file.</p> <p>Allowable values are True and False.</p> <p><u>Example</u></p> <pre><add key="ShowExtendedErrorMessages" value="true" /></pre>
slogan	<i>Empty</i>	<p>A text message that can be displayed on the Web Verifier browser header with corporate messages / announcements / Corporate Slogan.</p>
SYSTEM_LONG_DATE_FORMAT	<i>Empty</i>	<p>This special XML key is located in each resources /[3-letters language]/Brainware.Verifier.WebClient.resx file.</p> <p>This key contains the date formatting pattern for the last access date column presentation within the batch list for that language. It is optional, and if set to <i>Empty</i>, then the system default formatting is applied.</p> <p>For Chinese Traditional and Simplified languages the date format to be used is YYYY-MM-DD, and the time format is 24 based without any Chinese characters.</p> <p><u>Example for the Chinese:</u></p> <pre><data name="SYSTEM_LONG_DATE_FORMAT" xml:space="preserve"> <value>yyyy-MM-dd, hh:mm:ss</value> </data></pre>
Trace log/ debug file 1		<p>It keeps the debug/ trace log file under X size. Once the X size is reached, the log is recycled/ deleted and a new log is created.</p> <p>For example, below its set to 100kb, as soon as the trace.log file went over 100kb the log file size changed to 0kb and new log messages were written.</p> <pre><appender name="RollingFile" type="log4net.Appender.RollingFileAppender,log4net"> <layout type="log4net.Layout.PatternLayout,log4net"></pre>

Option	Default Value	Description
Trace log/ debug file 2		<p>When the file reaches X size, it is archived as trace.log.1 and a new trace.log will be created. When the trace.log exceeds size once more, trace.log.1 becomes trace.log.2 and the existing trace.log becomes trace.log.1, again a new trace.log will be created.</p> <p>trace.log.1</p> <p>config</p> <pre data-bbox="695 684 1369 831"><appender name="RollingFile" type="log4net.Appender.RollingFileAppender, log4net"> <layout type="log4net.Layout.PatternLayout, log4net"></pre>
usePath		<p>Required attribute. Enable/disable using pathToProjectExe parameter. Set this attribute to false to set pathToProjectExe parameter is current directory.</p>
waitLoadTimeOut		<p>Required attribute. Timeout for initial loading of project.exe. This parameter is used with enable option: loadInSeparateProcess = true</p>

Appendix B File Permission Matrix

The table below displays the various file permissions that are used within Perceptive Intelligent Capture.

Role/Group	Description
Administrators	Administrator user with full access rights to all application modules and features.
Developers	The groups of users that develop, maintain, and enhance projects.
Learnset Manager	Typically one user in the organization responsible for maintaining the project Learnsets.
Advanced Verifiers	Several users responsible for identifying documents for improvements to the project Learnset.
Standard Verifiers	Data entry clerks responsible for document correction.
RTS Service User	The service account responsible for running the service for automatic document processing. Configured only on the Server machines.

Directory	Groups	NTFS Permissions						
		Full Control	Modify	Read & Execute	List Folder Content	Read	Write	No Access
License Share	Administrators Developers Learnset Manager Advanced Verifiers Standard Verifiers RTS Service User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Root Batch Folder	Administrators Developers Learnset Manager Advanced Verifiers Standard Verifiers RTS Service User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Common Folder	Administrators Developers Learnset Manager Advanced Verifiers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Standard Verifiers RTS Service User	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Directory	Groups	NTFS Permissions						
		Full Control	Modify	Read & Execute	List Folder Content	Read	Write	No Access
Global Project	Administrators Developers Learnset Manager RTS Service User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Advanced Verifiers Standard Verifiers	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local Project	Administrators Developers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Learnset Manager RTS Service User Standard Verifiers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Advanced Verifiers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Local Learnset	Administrators Developers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Learnset Manager RTS Service User Standard Verifiers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Advanced Verifiers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Global Learnset	Administrators Developers Learnset Manager RTS Service User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Advanced Verifiers Standard Verifiers	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ASE Pool	Administrators Developers RTS Service User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Learnset Manager Advanced Verifiers Standard Verifiers	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ASSA CSV File	Administrators Developers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Directory	Groups	NTFS Permissions						
		Full Control	Modify	Read & Execute	List Folder Content	Read	Write	No Access
	RTS Service User							
	Learnset Manager Advanced Verifiers Standard Verifiers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Appendix C Registry Options

The table below contains some items which can be modified in the Registry with regards to enabling/disabling/customizing certain features.

Option	Default Value	Description
DumpProjectScriptCode	N/A	<p>This key is available to allow Support/Certified System Administrator / Professional Services to carry out advanced troubleshooting on any issues with script running on the Web Verifier.</p> <p>To create the registry key to provide script dumps, follow the instructions outlined below:</p> <ol style="list-style-type: none"> 1. Launch Windows Registry Editor 2. Navigate to HKEY_LOCAL_MACHINE, SOFTWARE, Perceptive (or HKEY_LOCAL_MACHINE, SOFTWARE, Wow6432Node, Perceptive for 64 bit systems), and Cedar location. 3. Create a new REG_DWORD (DWORD Value key) and call it DumpProjectScriptCode 4. Modify the new key created and enter the one of the following values: <ul style="list-style-type: none"> 3 – to enable this feature for script page export. 0 – to disable this feature. <p>With the feature enabled the scripting engine files can be used to review any compilation problems, this is an advanced feature and requires advanced knowledge of the product.</p>

Option	Default Value	Description
ErrorTraceDir	N/A	<p>The ErrorTraceDir registry key is available for those customers who wish to place the component tracing logs in a different location than the default Perceptive Intelligent Capture\bin\log folder. The registry key allows the administrator to place the logs in a specific folder location separate from the core product logs.</p> <p>The registry setting is only applicable for the component logs, not for the core product logs.</p> <p>To configure a new location for Component Logs, follow the instructions outlines below:</p> <ol style="list-style-type: none"> 1. Launch Windows Registry Editor 2. Navigate to HKEY_LOCAL_MACHINE, SOFTWARE, Perceptive (or HKEY_LOCAL_MACHINE, SOFTWARE, Wow6432Node, Perceptive for 64 bit systems), and ErrorTrace location. 3. Create a new REG_SZ (String Value key) and call it ErrorTraceDir 4. Modify the new key created and enter the filepath location for component logs to be entered. Verify that the path entered exists and the service account/user has sufficient permissions to write to that location. <p>For the change to take place, exit all Perceptive Intelligent Capture application, and stop any services running on the machine related to Perceptive Intelligent Capture, then launch the application and all new component logs will be written in the desired location.</p>

Option	Default Value	Description
LanguageSupportWorkflowSettingsVisible	N/A	<p>This registry key is used within Perceptive Intelligent Capture to allow the developer to utilize advanced Language Support configuration and setting. This additional feature can be enabled via the Registry using the steps outlined below:</p> <ol style="list-style-type: none"> 1. On the server/machine where Designer is installed and used, launch the Windows Registry Editor. 2. Navigate to HKEY_LOCAL_MACHINE, SOFTWARE, Perceptive (or HKEY_LOCAL_MACHINE, SOFTWARE, Wow6432Node, Perceptive for 64 bit systems), and Cedar location. 3. Create a new REG_DWORD (DWORD Value key) and call it LanguageSupportWorkflowSettingsVisible 4. Modify the new key created and enter the one of the following values: <ol style="list-style-type: none"> a. 1 – to enable this feature to allow the developer to configure advanced options for language conversion. b. 0 – to disable this feature. <p>For the change to take place, exit all Perceptive Intelligent Capture application, and stop any services running on the machine related to Perceptive Intelligent Capture, then launch the application and all new component logs will be written in the desired location.</p> <p>To view the advanced options in Perceptive Intelligent Capture Designer,</p> <ol style="list-style-type: none"> 1. Launch Designer application 2. From the Options Menu select Settings 3. Navigate to the Definition tab and new settings will display. <p>With the settings showing, the developer can utilize additional language features which will allow them to convert words/etc to extended ASCII character set.</p>

Option	Default Value	Description
<p>ASEnginePoolAllowedCharDifference</p>	<p>N/A</p>	<p>In certain instances some duplicates in the ASE/ASSA search may not be returned from the vendor/customer search. In these cases it may be that the ASSA engine perceives these as duplicates of existing entries.</p> <p>There is a configuration step that can be undertaken which can return the suspected duplicates as well. This may slightly increase the results of the ASE pool, but also return potential items which were not returned in the original search.</p> <p>To configure the ASE pool to return additional likely results:</p> <ul style="list-style-type: none"> • Launch Registry Editor • Navigate to HKLM\Software \Perceptive\Cedar (or HKLM\Software\Wow6432Node\Perceptive\Cedar for 64 bit systems) • Create a new DWORD registry variable for ASEnginePoolAllowedCharDifference • Close the Registry Editor <p>Reanalyze the document once more and any missing entries should now appear.</p>

Option	Default Value	Description
HideBatchReleaseDialog	0	<p>This key allows Support/ Certified System Administrator/ professional Services to disable the Batch Release dialog box within the Verifier, where the business does not require prompting users on next task. The registry value can be used to determine the next action carried out by users.</p> <p>The default action of the Batch Release dialog box is to verify the next invalid batch. When the dialog is suppressed, this value is maintained. To change to a different action, use the Batch Release dialog box once, then change the setting accordingly and click OK.</p> <p>To create the registry key to suppress the Batch Release confirmation screen, follow the instructions below:</p> <p>Launch Windows Registry Editor</p> <p>Navigate to HKEY_LOCAL_MACHINE\SOFTWARE \Perceptive\ Cedar (or HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Perceptive\ Cedar for 64 bit systems)</p> <p>Create a new REG_DWORD (DWORD Value key) and call it HidebatchReleaseDialog</p> <p>Modify the new key created and enter the one of the following values:</p> <p>0- to enable the confirmation screen (default)</p> <p>1- to disable/ hide the confirmation screen</p> <p>For the change to take place, exit all Perceptive Intelligent Capture application, and then launch the application again.</p> <p>To view that the change has been implemented:</p> <ol style="list-style-type: none"> 1. Launch Verifier 2. Verify the batch to completion – no dialog box should appear <p>This setting is available from version 5.3.</p>

Option	Default Value	Description
All	1	<p>The ErrorTrace registry Key was introduced into core product logs to provide additional trace information on any errors or warnings in the system. The default value after installation is to record errors only related details.</p> <p>Modify the registry values to set the value from 0 to either 1, 2, or 3</p> <p>1-Only Errors 2-Errors & Warnings 3-Errors & Warnings&Information</p> <p>To configure ErrorTrace All value, complete the following steps:</p> <ol style="list-style-type: none"> 1. Launch Registry Editor 2. Navigate to HKEY_LOCAL_MACHINE\SOFTWARE\Perceptive\ErrorTrace (or HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Perceptive\ErrorTrace for 64 bit systems) 3. Create a new DWORD registry variable for All, set to the appropriate value of either 0, 1, 2, or 3. 4. Close the Registry Editor

Option	Default Value	Description															
MaximumDiskspace-UsageMB	N/A	<p>This registry value controls the amount of disk space allocated for component level logs on this server / workstation in MB. Setting this value to "0" has the same effect as if the value is not created at all, which is "deactivated".</p> <p>To configure the ASE pool to return additional likely results, complete the following steps:</p> <ol style="list-style-type: none"> 1. Launch Registry Editor 2. Navigate to HKEY_LOCAL_MACHINE\SOFTWARE\Perceptive\ErrorTrace (or HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Perceptive\ErrorTrace for 64 bit systems) 3. Create a new DWORD registry variable for MaximumDiskspaceUsageMB, set to the appropriate value in Mb. 4. Close the Registry Editor <table border="1" data-bbox="602 961 1408 1213"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Data</th> </tr> </thead> <tbody> <tr> <td>(Default)</td> <td>REG_SZ</td> <td>(value not set)</td> </tr> <tr> <td>All</td> <td>REG_DWORD</td> <td>0x00000003 (3)</td> </tr> <tr> <td>MaximumDiskspaceUsageMB</td> <td>REG_DWORD</td> <td>0x00000500 (1280)</td> </tr> <tr> <td>TotalDaysToKeepFiles</td> <td>REG_DWORD</td> <td>0x00000007 (7)</td> </tr> </tbody> </table>	Name	Type	Data	(Default)	REG_SZ	(value not set)	All	REG_DWORD	0x00000003 (3)	MaximumDiskspaceUsageMB	REG_DWORD	0x00000500 (1280)	TotalDaysToKeepFiles	REG_DWORD	0x00000007 (7)
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MaximumDiskspaceUsageMB	REG_DWORD	0x00000500 (1280)															
TotalDaysToKeepFiles	REG_DWORD	0x00000007 (7)															

Option	Default Value	Description															
TotalDaysToKeepFiles	N/A	<p>This registry value maintains the number of days the old component level logs are kept by the Perceptive Intelligent Capture server. Setting this value to "0" has the same effect as if the value is not created at all, which is "deactivated".</p> <p>To configure the ASE pool to return additional likely results, complete the following steps:</p> <ol style="list-style-type: none"> 1. Launch Registry Editor 2. Navigate to HKEY_LOCAL_MACHINE\SOFTWARE\Perceptive\ErrorTrace (or HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Perceptive\ErrorTrace for 64 bit systems) 3. Create a new DWORD registry variable for TotalDaysToKeepFiles, set to the appropriate value in numeric (total days to maintain logs – the screenshot below shows 7 days). 4. Close the Registry Editor <table border="1" data-bbox="602 1035 1411 1234"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Data</th> </tr> </thead> <tbody> <tr> <td>(Default)</td> <td>REG_SZ</td> <td>(value not set)</td> </tr> <tr> <td>All</td> <td>REG_DWORD</td> <td>0x00000003 (3)</td> </tr> <tr> <td>MaximumDiskspaceUsageMB</td> <td>REG_DWORD</td> <td>0x00000500 (1280)</td> </tr> <tr> <td>TotalDaysToKeepFiles</td> <td>REG_DWORD</td> <td>0x00000007 (7)</td> </tr> </tbody> </table>	Name	Type	Data	(Default)	REG_SZ	(value not set)	All	REG_DWORD	0x00000003 (3)	MaximumDiskspaceUsageMB	REG_DWORD	0x00000500 (1280)	TotalDaysToKeepFiles	REG_DWORD	0x00000007 (7)
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