



# PretonSaver™ Installation Guide

PretonSaver™ Release 3.2

June 2008  
Document Revision v1.0



## **Abstract**

This is the Installation Guide for PretonSaver™, an enterprise print management package, designed to maximize an organization's printing efficiency thus significantly reduce printing cost and the environment impact. If you are only interested in familiarization, demonstration or conducting an ink / toner saving test, you may want to consult the PretonSaver™ [Getting Started Guide](#).



Table of Contents

1. Introduction...4
1.1. Translations, Information Sources & New Versions of this Document..4
1.2. Feedback and Corrections.....4
1.3. What is PretonSaver™.....4
2. Before You Begin.....4
2.1. Hardware & Software Requirement.....5
2.2. Time Requirements.....5
3. Installation Overview .....6
3.1. Installation Outline.....6
4. Installing PretonCoordinator (server side installation) .....6
4.1. Pre-Installation Checklist.....6
4.2. Installation.....7
4.3. License Request and Deployment.....10
5. Installing PretonControl (GUI to PretonCoordinator) .....11
5.1. Pre-Installation Check List .....11
5.2. Installation.....11
6. Installing PretonSaverClient.....12
6.1. Manual Installation .....12
6.1.1. Pre-Installation Check List.....12
6.1.2. Installation .....12
6.2. Mass Deployment using .msi.....13
7. Upgrade Methods for PretonSaver™ Components .....13
8. Appendix .....13
8.1. Appendix A - PretonCoordinator Configuration Files.....13
8.1.2. Predefined Group Setup .....14
8.1.3. Basic Authentication .....14
8.2. Appendix B - Additions to the Next Releases of this Installation Guide 14



## 1. Introduction

The PretonSaver™ Installation Guide is a detailed, step by step guide, intended to quickly setup PretonSaver™ in a production environment. If you only intend to use it (not install it) you may want to consult the PretonSaver™ administration guide instead.

This document assumes that you have no prior experience with the PretonSaver™ package but do hold general Microsoft® Windows operating system administration experience.

### 1.1. Translations, Information Sources & New Versions of this Document

Translations, more information sources and new versions of this installation guide will be periodically posted in our web site: [www.preton.com](http://www.preton.com).

### 1.2. Feedback and Corrections

If you have questions or comments about this document, please feel free to email: [support@preton.com](mailto:support@preton.com). Preton™ support & documentation team welcome any suggestions or criticisms. If you find a mistake, please let us know so we can correct it in the next version.

Thanks!

### 1.3. What is PretonSaver™

PretonSaver™ is a client/server print management package, designed to maximize an organization's printing efficiency thus significantly reduce printing cost and the environment impact. PretonSaver™ through a state-of-the-art ink / toner saving algorithm and the collection and presentation of a vast array of printing statistical data, enables planning and enforcing of print rules. Dedicated pair; application, user, group or printer rules eliminate unwanted print jobs and dramatically reduce printer consumable usage as well as wear and tear. Users see no degradation in print quality and are completely unaware of when the change took place unless specifically advised. The PretonSaver™ package includes:

- **PretonCoordinator** – A central management server. With the main role of managing PretonSaverClients, collecting print-jobs data, generating statistical reports and applying/enforcing print rules, PretonCoordinator is ideally located on one of the enterprise servers, communicating with its SQL database.
- **PretonControl** – A configuration GUI application. With the main role of creating a pair application, user, group or printer print rules, as well as generating reports on a vast variety of printing parameters, PretonControl may be installed alongside PretonCoordinator, or on a remote desktop.
- **PretonSaverClient** – A desktop client. Responsible for the ink / toner optimization and print rules implementation. PretonSaverClient runs as a service where the print jobs are emulated, typically on a user's desktop.

## 2. Before You Begin

Before you can install any of the PretonSaver™ components you will need to be sure your server and desktop machines are capable.



## 2.1. Hardware & Software Requirement

We recommend installing one Coordinator per 10,000 users, all Coordinators can report to the same database or to separate ones. In case the customer is interested in using only one Coordinator machine we recommend server grade hardware with dual processors and a minimum of 4GB RAM.

	Software Requirements	Hardware Requirements
<b>PretonCoordinator</b> (server component)	<u>OS:</u> Microsoft® Windows Server 2008 (32 BIT) Microsoft® Windows Server 2003 Microsoft® Windows XP (minimum SP 2) *On installation up to 100 users  minimum .NET Framework 2.0  <u>Databases:</u> Microsoft® SQL Server 2000 / 2005 / 2008 Express, Standard or Enterprise edition	Intel Pentium 4 or AMD Athlon CPU 512 of system memory (RAM) 1 GB of available disk space

**Please Note:**

According to Microsoft® hardware requirements. In the case of more than 1000 users it is recommended that the database will reside on a separate machine.

**Database Size:**

Requires 200-600 bytes per one print job recorded in the database.

Therefore, the estimated size of Print Jobs table in the database can be calculated using the enclosed formula: (Number of users) \* (average number of Print Jobs) \* (byte per Print Jobs)

<b>Preton Control</b> (GUI to PretonCoordinator)	Microsoft® Windows XP SP2 and up Microsoft® Vista Microsoft® Windows Server 2003 family Microsoft® Windows Server 2008 (32 BIT)  .NET Framework 2.0 and up	Intel Pentium III or AMD Athlon CPU 256 of system memory (RAM) 10 MB of available disk space
<b>PretonSaverClient</b> (desktop client component)	Microsoft® Windows 2000 SP4 and up Microsoft® Windows XP SP2 and up Microsoft® Windows Vista Microsoft® Windows Server 2003 Microsoft® Windows Server 2008 (32 BIT)  Recommended Windows Management Instrumentation (WMI) running  On Novell network - client for Microsoft networks  .NET Framework 2.0 and up	Intel Pentium III or AMD Athlon CPU 256 of system memory (RAM) 10 MB of available disk space

## 2.2. Time Requirements

Start to finish can be expected to take from 1/2 to 1 hour including server-side-setup + deploying to 5 client desktops.



### 3. Installation Overview

This guide assumes that you have full administrative access to all installation computers. PretonCoordinator runs as a service on the server machine. PretonSaverClient runs as a service on client desktop machines. If you are installing both PretonCoordinator and PretonSaverClient on the same machine, keep in mind that the PretonCoordinator service must be up and running before the PretonSaverClient service is loaded.

#### 3.1. Installation Outline

A single license key activates all 3 software components, and is placed in the PretonCoordinator installation directory on the server-side. There is no license deployment on client machines; however a PretonSaverClient installation will need a running PretonCoordinator service with a valid license, in order to be able to register and receive its own license.

Therefore components should be installed in the following order:

1. PretonCoordinator installation on the server-side.
2. License request and placement in PretonCoordinator directory on the server-side.
3. PretonControl installation on a client desktop or on the server-side.
4. PretonSaverClient installation on client desktops.

### 4. Installing PretonCoordinator (server side installation)

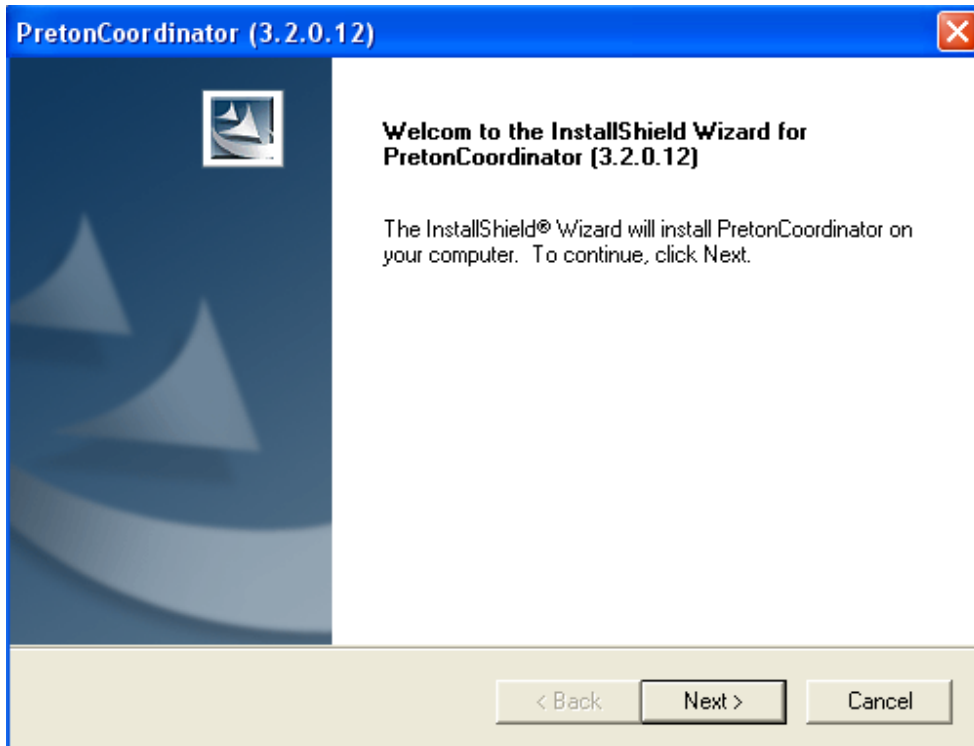
#### 4.1. Pre-Installation Checklist

You have administrative rights on the server machine		
Minimum .Net framework 2.0 is installed		
	<u>Login</u>	<u>Password</u>
SQL credentials for creating the PretonDb database		
SQL credentials for PretonCoordinator database access (may be the same as the above)		



## 4.2. Installation

Run PretonCoordinatorSetup.exe to initiate the Install Shield. You will be greeted with this Welcome screen:



Click Next

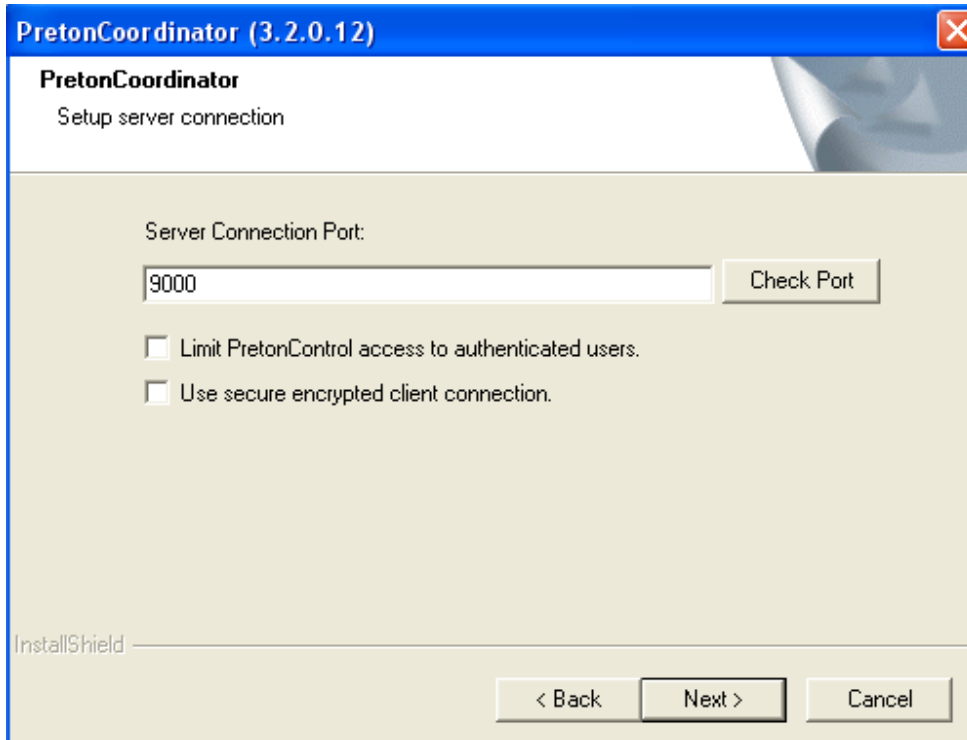
Read and accept the license agreement. Click next.

Fill-in your customer information name, select "installation for". Click next.

Choose Destination Location use the recommended default, or not, click next.



Set up server connection:



Server Connection Port

Default port is 9000. However, this port may be taken by another application or blocked. Use the check port button to verify selected port availability

Limit PretonControl access to authenticated users

If you choose to use this option, you will be required to add three security groups to the Active Directory or locally on the PretonCoordinator machine (Basic Authentication).  
It is possible to use the pre-defined Windows groups, configured in PretonCoordinator configuration file (see Appendix A)  
Basic authentication requires a change in the PretonCoordinator configuration file (see Appendix A)

PretonUser: View reports and configuration settings (read only).

PretonPowerUser: View report, perform document search and view configuration settings (read only).

PretonAdministrator: Unlimited access (read-write).

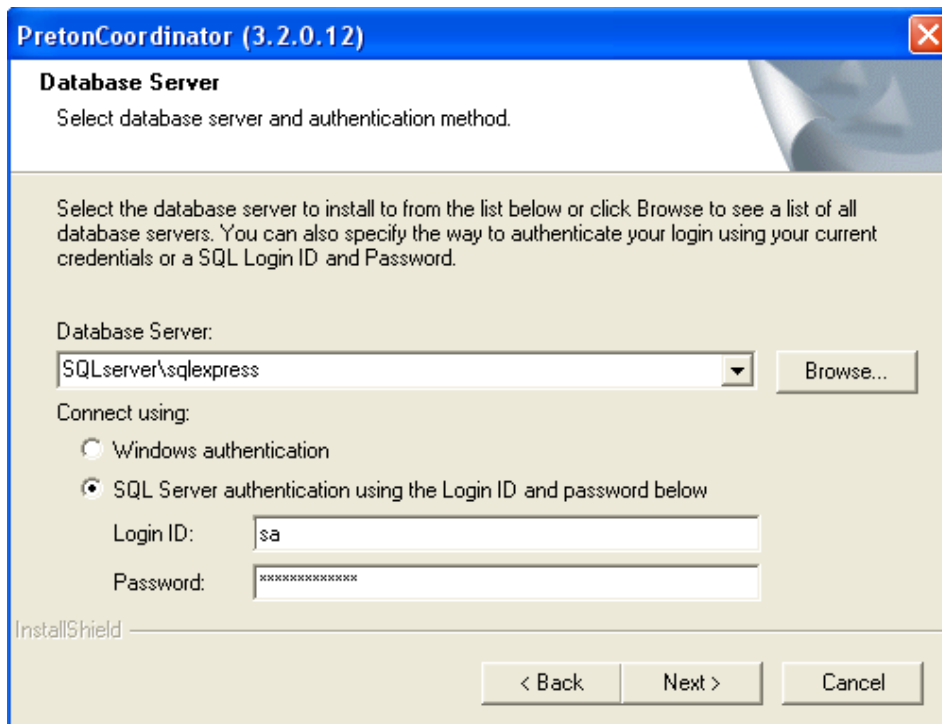
Use secure encrypted client connection

This option will authenticate each connection to PretonCoordinator using NTLM or Kerberos, and encrypt all communication. When choosing this option make sure you configure **PretonSaverClient** to use authentication as well.

Click next.  
Select SQL Server and authenticating method:



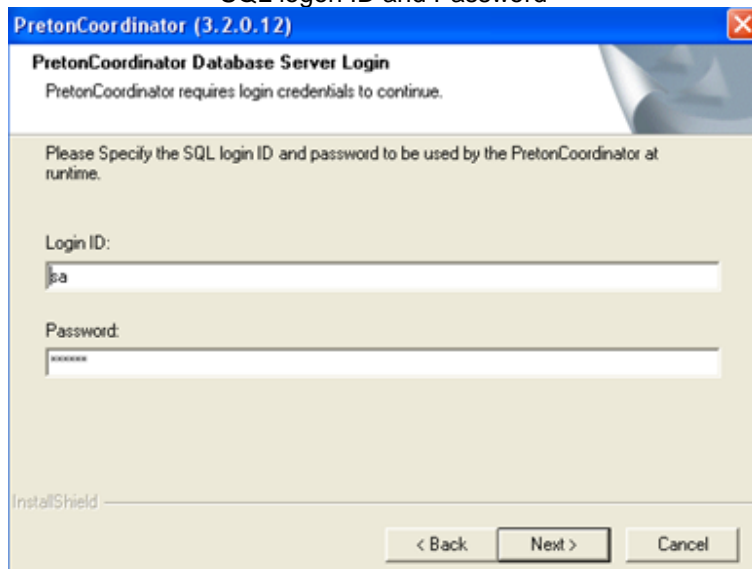
(In case using the Combined Installer please check the remark in the end of this paragraph)



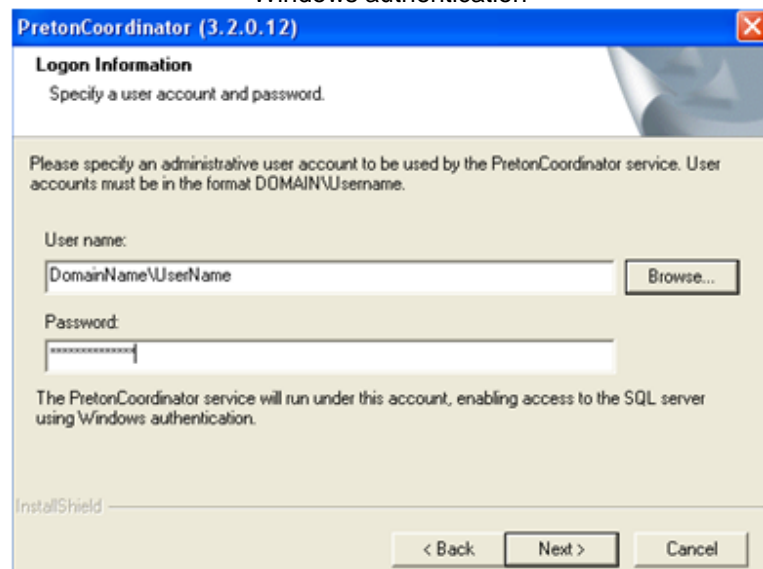
Click next

Depending on your previously selected method of authentication, a second authentication dialog will ask for a new set of credentials to be used by the PretonCoordinator service at runtime.

SQL logon ID and Password



Windows authentication



To change the SQL logon ID and Password after installation use

To change the Windows credentials after installation, change the



the installation repair option

PretonCoordinator service logon property from the service.msc

Click next

Confirm installation by clicking Install

Installation Complete, click Finish

Please note:

While installing using the **Combined Installer** a PretonCoordinator with an embedded SQL Server 2005 Express aimed to ease with server side installation in case of no SQL server installation background.

- Database Server is MACHINE\_NAME\PT\_SQLEXPRESS
- SA password is saPretonSQL2005

### 4.3. License Request and Deployment

In order to activate the product please copy the file "PretonCoordinator.exe.key" located under C:\Program Files\Preton\PretonCoordinator, in a default installation, into an email to your software reseller or [support@preton.com](mailto:support@preton.com)

You will receive, via email, a license file "Server.lic". Place the file in the same PretonCoordinator directory (C:\Program Files\Preton\PretonCoordinator, in a default installation). After placing the license, start PretonCoordinator service manually. Go to **Start > Control Panel** click **Administrative Tools** and then click **Services**. Select PretonCoordinator service and click action menu and then Start.



## 5. Installing PretonControl (GUI to PretonCoordinator)

### 5.1. Pre-Installation Check List

You have administrative rights on the machine	
Minimum .Net framework 2.0 is installed	
PretonCoordinator IP / Host Name & port number (default 9000)	
No firewall restriction on connection to PretonCoordinator IP / port	

### 5.2. Installation

Run PretonControlSetup.exe to initiate the Install Shield.

You will be greeted with a Welcome Screen, click next.

Choose Destination Location use the recommended default, or not. Click next.

Confirm installation by clicking Install, and wait for the installer to complete installation process.

When Installation Complete appears Click Finish

Setup has created a PretonControl desktop icon, double-click it.

A PretonCoordinator connection setup appears. You should fill out the details as they were setup at the PretonCoordinator installation. The authentication and encryption options will be set automatically once you click 'Check Connection' or 'Ok'.

In case of Active Directory authentication if the user currently "logged in" does not have the appropriate permissions, please deselect the check box 'connect using logged in user', and fill in the appropriate "User name" and "Password". Authenticated users will have permissions according to their predefined role.

In case of Basic authentication please deselect the check box 'connect using logged in user', select the check box 'Use Basic authentication'.

Fill in the appropriate "User name" and "Password".

Authenticated users will have permissions according to their predefined role.



## 6. Installing PretonSaverClient

PretonSaverClient can be individually installed on desktop client or massively deployed with Active Directory or tools like: System Management Server (SMS), UniCenter, OpenView, and Zen. In both cases PretonSaverSetup.msi is used.

### 6.1. Manual Installation

Run PretonSaverSetup.msi to initiate the Install Shield.

You will be greeted with a Welcome Screen, click next.

Choose Destination Location use the recommended default, or not. Click next.

#### 6.1.1. Pre-Installation Check List

You have administrative rights on the machine	
Minimum .Net framework 2.0 is installed	
PretonCoordinator IP / Host Name & port number (default 9000)	
No firewall restriction on connection to PretonCoordinator IP / port	
Recommended Windows Management Instrumentation (WMI) running	
On Novell network - client for Microsoft networks	

#### 6.1.2. Installation

Run PretonSaverSetup.msi to initiate the Install Shield.

You will be greeted with a Welcome Screen, click next.

Fill out customer information, click next

Fill out Preton Coordinator Server IP/Host name and port, click next.

The screenshot shows a Windows-style dialog box titled "PretonSaver - InstallShield Wizard". The main heading is "PretonSaver Host Setting". Below the heading, it says "Please enter the PretonCoordinator host IP and port". There are two input fields: "Preton Coordinator server IP\host name:" with the text "CoordinatorSRV" entered, and "Port:" with the text "9000" entered. At the bottom, there is a checkbox labeled "Use secure connection." which is currently unchecked.

Choose Destination Location use the recommended default, or not. Click next.

Confirm installation

Reboot the machine (reboot is necessary for PretonSaver client to become operational)



## 6.2. Mass Deployment using .msi

MSI deployment is perfect for large scale deployments via Active Directory or other software distribution software like System Management Server (SMS), UniCenter, OpenView, Zen etc.

PretonSaverSetup.msi installer will **not** ask for reboot at the end of the installation process. This behavior was chosen to support deployment during business hours. **PretonSaverClient** will become operational after the next reboot of the client machine.

In order to prepare the installation package you will need to use MSI option '/a' to build an administrative package

- 1) Create shared network folder
- 2) Open command prompt, Start, Run, CMD
- 3) Install the MSI a local folder e.g. "C:\Temp\PretonPkg" the install command is: `msiexec /a PretonSaverSetup.MSI`
- 4) A new MSI file and some software will be created in the "C:\Temp\PretonPkg" folder, copy all folder content to the shared network folder, and use the new created MSI for creating the installation package.
- 5) In order to successfully install PretonSaverSetup.msi one must use the Computer Configuration Group Policy option (and NOT User Configuration)

In case you are not familiar with Active Directory, a quick web search for "**MSI Deployment via Active Directory**" should get you up and running ☺

## 7. Upgrade Methods for PretonSaver™ Components

Upgrade can be done on server side and / or client side

All components upgrade:

Upgrade PretonCoordinator, PretonControl, and PretonSaverClient machines

1. Backup the PretonDb database
2. Uninstall the old version of the PretonCoordinator and the PretonControl
3. Install the new version of the PretonCoordinator and the PretonControl (during this step the PretonDb database will upgrade)
4. For PretonSaverClient machine upgrade follow the instruction in the next section (Minor release)

Client side upgrade:

Upgrade PretonSaverClient machines

PretonSaverClient machine upgrade using Preton upgrade mechanism will require the use of the new upgrade wizard (see PretonSaver™ Administration Guide).

Patch deployment:

Patch is deployed using the upgrade wizard the process is identical the PretonSaverClient upgrade process

## 8. Appendix

### 8.1. Appendix A - PretonCoordinator Configuration Files

PretonCoordinator configuration files are at:

C:\Program Files\Preton\PretonCoordinator\PretonCoordinator.exe.config

After editing:

- Save the file
- Restart the PretonCoordinator service, for changes to take effect.



### 8.1.2. Predefined Group Setup

Highlighted group name are predefined Windows group used as Preton authentication groups

```
<add key="PretonUser" value="PredefineGroupA"/>
<add key="PretonPowerUser" value="IT"/>
<add key="PretonAdministrator" value="Administrators"/>
</appSettings>
```

### 8.1.3. Basic Authentication

After installing using the 'Limit PretonControl access to authenticated users' option, look for the enclosed line in PretonCoordinator config file:

```
securityPackage="negotiate" authenticationLevel="call" authenticationFilter="UI"
```

The authenticationFilter value should be changed from UI to BasicUI the updated line should look like:

```
securityPackage="negotiate" authenticationLevel="call" authenticationFilter="BasicUI"
```

## 8.2. Appendix B - Additions to the Next Releases of this Installation Guide

Additions to the next releases of the installation guide:

- Uninstall string for MSI
- Install PretonCoordinator in a Failover cluster environment
- Installation instructions for SQL server mixed mode
- Enable TCP/IP on SQL Server using default port 1433, case using non-default SQL Server port  
PretonCoordinator will need to be installed like in the enclosed example DBSRV\SQLEXPRESS:7777
- Bundled installer with SQL EXPRESS
- Post inst SQL script
- Troubleshooting and FAQ