



Guidelines for Successfully Upgrading to Pentaho 9.0

HITACHI

Inspire the Next

Change log (if you want to use it):

| Date | Version | Author | Changes |
|---------|---------|-------------|---------------------------|
| 2/11/20 | 1.0 | Megan Brown | Updated from 8.3 document |
| | | | |
| | | | |

Contents

- Overview..... 1
 - Before You Begin..... 1
- Best Practices for Upgrading – Step by Step 2
 - Determine Upgrade Path 2
 - What Version Am I Currently On? 2
 - What's New in Pentaho Documentation..... 3
 - Check System Environment 3
 - Which Path Will Get Me to 9.0? 3
 - Perform Incremental Upgrade (if necessary) 4
 - Perform Pentaho 9.0 Upgrade 4
 - Update Pentaho Design Tools 4
 - Start and Test Pentaho 4
- Related Information 5
- Upgrade Checklists..... 6

This page intentionally left blank.

Overview

This document covers some best practices on upgrading your Pentaho software. You will learn the upgrade steps including what to have ready before you begin, and what to back up and restore.

Our intended audience is Pentaho administrators.

The [Components Reference](#) in Pentaho Documentation has a complete list of supported software and hardware.

Before You Begin

This document assumes that you know specifics of your Pentaho installation and usage, including what environments you have configured (development, test, production, and so on), your server's operating system and version, the user information for the user running Pentaho processes, any customizations, and other details.

There are [checklists](#) included at the end of this document, providing more details and a way for you to keep track of your progress.

Best Practices for Upgrading – Step by Step

The process of upgrading to Pentaho 9.0 involves a few steps, but it does not have to be difficult. You will need to have all the necessary information and software available to you, and then it will be a simple matter of following your upgrade path from beginning to end. If you have custom configurations, contact your CSM, and then Support, and let them know before upgrading.

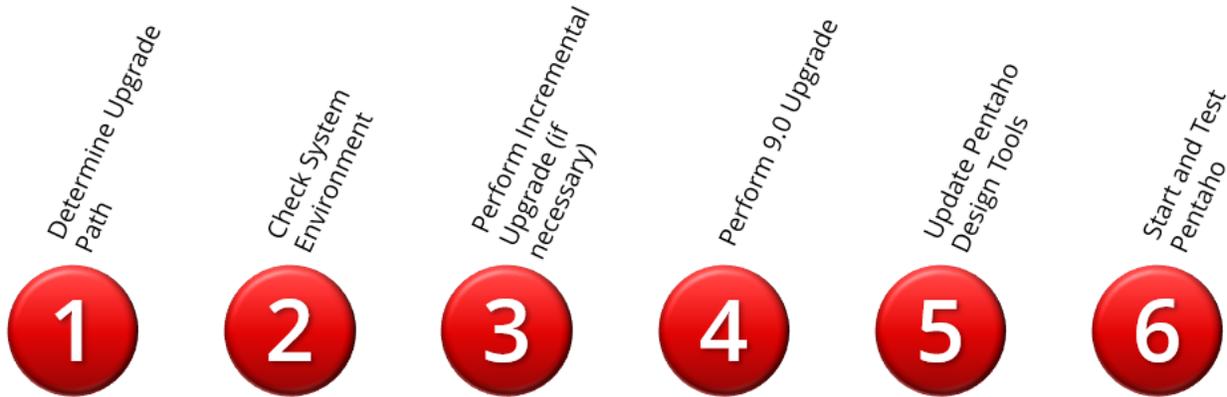


Figure 1: Upgrading to Pentaho 9.0

You can find details on these topics in the following sections:

- [Determine Upgrade Path](#)
- [Check System Environment](#)
- [Perform Incremental Upgrade \(if necessary\)](#)
- [Perform Pentaho 9.0 Upgrade](#)
- [Update Pentaho Design Tools](#)
- [Start and Test Pentaho](#)

Determine Upgrade Path

The first thing you'll need to do when you are tasked with upgrading is to figure out which upgrade path to take. Your upgrade path is dependent on a few things, mainly your current version of Pentaho and which version you want to upgrade to.



If you don't see your current version listed in this document, please check [here](#) and/or contact Support for assistance.

What Version Am I Currently On?

To find out which version of Pentaho you have installed, open the PDI Client (Spoon) or the Pentaho User Console (PUC), and click on **Help**, and then **About**.

If you need release notes for any Pentaho version, check the Pentaho Customer Portal.

What's New in Pentaho Documentation

- [What's New in Pentaho 9.0](#)
- [What's New in Pentaho 8.3](#)
- [What's New in Pentaho 8.2](#)
- [What's New in Pentaho 8.1](#)
- [What's New in Pentaho 8.0](#)

Check System Environment

To upgrade as smoothly as possible, you will need to know all the relevant details about your Pentaho installation and environment(s). The Pentaho [Upgrade Checklists](#) will help you with these details.

Once you have all this information, make sure that your current specifications meet the requirements for your new version of Pentaho. The [Components Reference](#) for Pentaho 9.0 has a complete list of specifications.



*If you have custom configurations, contact your CSM, then Support, and let them know **before** upgrading.*

Which Path Will Get Me to 9.0?

If you are currently running Pentaho version 7.1 or greater, your process will be straightforward. You will be able to [upgrade directly to Pentaho 9.0](#) from your current version, so you can [skip to that section](#).

If you are running a version prior to 7.1, you will need to perform an incremental upgrade. Here is your path:

- If you are running version 7.0, you will need to [upgrade first to 8.3](#), and from there [to 9.0](#).
- If you are running version 6.1, you will need to [upgrade first to 8.1](#), and from there [to 9.0](#).
- If you are running version 6.0, you will need to [upgrade first to 7.1](#), and from there [to 9.0](#).

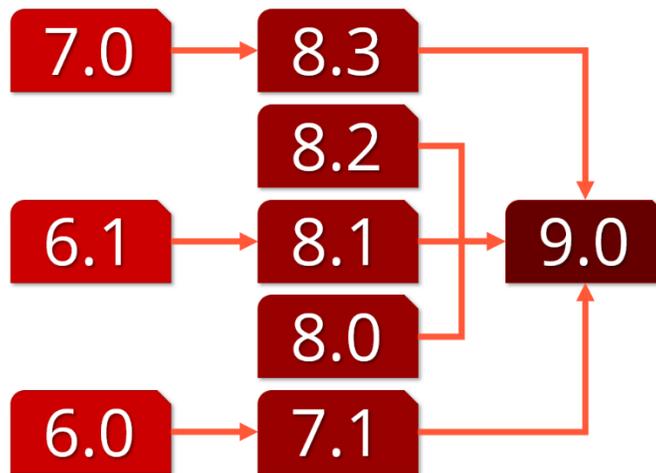


Figure 2: Upgrading to 9.0 from 6.0 - 8.3

Perform Incremental Upgrade (if necessary)

If you are running a version of Pentaho prior to 7.1 and need to do an incremental upgrade to get to 9.0, you will need to follow some detailed instructions including backing up and restoring your configuration and solutions files and upgrading to your interim Pentaho version. Then you will be able to move on to the instructions for installing 9.0.

- **Upgrading 6.0 to 8.1:** Follow [these instructions](#) to upgrade to 8.1. Once you have completed all the instructions there, move on to [Perform Pentaho 9.0 Upgrade](#).
- **Upgrading 6.1 to 7.1:** Follow [these instructions](#) to upgrade to 7.1. Once you have completed all the instructions there, move on to [Perform Pentaho 9.0 Upgrade](#).
- **Upgrading 7.0 to 8.3:** If you are using Pentaho 7.0 that was previously upgraded to the *DI server only*, follow the [DI Server](#) instructions. Otherwise, follow the [8.3 Pentaho Upgrade instructions](#). Once you have completed the 8.3 installation, move on to [Perform Pentaho 9.0 Upgrade](#).

Perform Pentaho 9.0 Upgrade

After your installation folder and repository databases are backed up, and you are running Pentaho 7.1+, you are ready to install Pentaho 9.0.



We recommend that you use the archive method for installing Pentaho.

The [Upgrade the Pentaho Server](#) documentation shows how to install Pentaho 9.0.

Update Pentaho Design Tools

The Pentaho Design Tools, also known as Pentaho Client Tools, are available for reinstallation either with the Pentaho Business Analytics Installation Wizard or manually.

[Installation of the Pentaho Design Tools](#) walks you through this process.

Start and Test Pentaho

Once you have upgraded your software and updated your Pentaho Design Tools, all that remains is to start and test your new Pentaho server software.

1. Begin with [Starting the Pentaho Server after an Archive Installation](#).
2. Once you have successfully restarted your Pentaho Server, move on to the [Post-Upgrade Tasks](#).

For troubleshooting, refer to [Installation and Upgrade Issues](#).

Related Information

Here are some links to information that you may find helpful while using this best practices document:

- [Import and Export PDI Content](#)
- [Installation and Upgrade Issues](#)
- [Installation of the Pentaho Design Tools](#)
- [Pentaho Components Reference](#)
- [Pentaho Customer Portal](#)
- [Pentaho Training Courses](#)
- [Starting the Pentaho Server after an Archive Installation](#)
- [Upload and Download from the Pentaho Repository](#)
- Upgrades
 - [Upgrade to Pentaho 9.0](#)
 - [Upgrade to Pentaho 8.3](#)
 - [Upgrade to Pentaho 8.2](#)
 - [Upgrade to Pentaho 8.1](#)
 - [Upgrade to Pentaho 7.1](#)
- What's New in Pentaho
 - [9.0](#)
 - [8.3](#)
 - [8.2](#)
 - [8.1](#)
 - [8.0](#)
 - [7.1](#)

Upgrade Checklists

These checklists are designed to give you a reference point for each step of your upgrade. Included are lists for general steps, details about your server environment, data integration specifics, and Pentaho tools and content.

- [General Upgrade Checklist](#)
- [General Network Environment](#)
- [Pentaho Server \(or BA Server\)](#)
- [Business Analytics Content](#)
- [Data Integration Environment](#)

Table 1: General Upgrade Checklist

| Question | Notes |
|--|-------|
| What is the currently installed Pentaho software and version? | |
| Did you determine your incremental upgrade path (if any)? | |
| What is the installation method used? (archive or manual) | |
| Did you back up your Pentaho environment, including your database and solutions files? | |
| Did you back up your data and configurations? | |
| Did you install the new Pentaho version? | |
| Did you restore your backups and custom configurations? | |
| Did you update the Pentaho Design Tools? | |
| Did you start and test your Pentaho Server? | |

Table 2: General Network Environment

| Question | Notes |
|---|-------|
| What is the minimum and maximum memory allocated to the Pentaho JVMs? | |
| What are the configured environments? (Dev, Test, Prod, other) | |
| What is the server's operating system and version? | |
| What are the server's processing specifications and cores? | |
| What is the available memory to the operating system? | |
| What is/are the physical location and proximity of the server(s)? (same country, data center, rack, other) | |
| What is the username and password of the OS users who runs the Pentaho process? | |
| What plugins have been installed on or removed from the server? | |
| Is a proxy or load balancer used in front of the Pentaho server(s)? | |
| Have other configuration files been modified from their defaults of a fresh installation? If so, are these files backed up? | |
| Have any language localizations been made? | |
| Is Pentaho integrated with other web applications? If so, what URLs are used for the integration? | |
| Has the Pentaho UI been customized or themed? | |
| Is Pentaho clustering being used? | |
| Are DI-only servers set up within the cluster? | |

Table 3: Pentaho Server (or BA Server)

| Question | Notes |
|--|-------|
| What scripts are used to start/run Pentaho (<code>ctlscript.sh</code> , <code>start-pentaho.sh</code> , <code>ctl.sh</code> ...)? | |
| How are users authenticated (Pentaho, LDAP, JDBC...)? | |
| How are users authorized for content (Pentaho, JDBC...)? | |
| Are there security extensions in place (SSO, DSP, SQL Generator...)? If so, is the source code backed up? | |
| Have you implemented logging and monitoring? | |
| Have any JNDI datasources been added to <code>context.xml</code> or <code>server.xml</code> ? | |
| How many metadata models have been created and used? Are the schemas secured by role? | |
| How many users run reports? Where are those users located geographically? | |
| Have you exported your BA repository? | |
| Have you exported your usage data? | |

Table 4: Business Analytics Content

| Question | Notes |
|---|-------|
| What types of content are being used and how many of each (xanalyzer, xdash, prpt, xaction, waqr, jpivot...)? | |
| Which repository is used to store content (MySQL, PostgreSQL, Oracle, SQL Server)? | |
| Are there any reports that are executed on a schedule? If so, which reports and on what schedule? | |
| Have ACLs been applied to specific reports? Or just defaults? | |
| If using PRD or xactions, what are the datasource types (SQL, MDX, PDI...)? | |
| If using PRD, have drill links been defined, and are they using manual linking or Pentaho file linking? | |

Table 5: Data Integration Environment

| Question | Notes |
|--|-------|
| What scripts are used to start/run Pan/Kitchen/Carte/DI-only server? | |
| Which repository is used to store transformations and jobs? (files, file repository, database repository, enterprise repository) | |
| What is the frequency of job execution? | |
| What is the number of jobs executing each hour/day/week? | |
| What is the number of transformations executing in those jobs? | |
| Are the jobs running on one server or several servers? | |
| How are jobs scheduled? | |
| What security is used for developers and operators? | |