**Installation**

**Audience:** Customers who want to install the Pentaho Suite for evaluation purposes or for production use.

There are several different methods for installing the Pentaho Suite. This article helps you decide which method is best for you. The Pentaho Suite consists of the Pentaho Server and client design tools. If you want to install the design tools only, see [Install the Pentaho Client Tools](https://help.pentaho.com/Documentation/7.0/0F0/Install_the_Pentaho_Client_Tools). If you want to upgrade your current version of the Business Analytics (BA) or Data Integration (DI) Server to the newest version, see [Upgrade BA and DI](https://help.pentaho.com/Documentation/7.0/0T0).

**About the Pentaho Suite Components**

The Pentaho Suite consists of the Pentaho Server, BA components (reporting and analysis tools), and DI components (PDI, Big Data plugins, and modeling tools). The Pentaho Suite contains the Pentaho Repository, which stores schedule, report, and other data needed for Pentaho to run properly. The Pentaho Suite is configured so that the Pentaho Repository runs on PostgreSQL. The database that houses the Pentaho Repository is different than the database that houses your data. The Pentaho Suite is configured so that the Pentaho Server is deployed on a version of the Tomcat web application server, which we supply.

**Pentaho Server**

The Pentaho Server hosts Pentaho-created and user-created content. It is a core component for executing data integration transformations and jobs using the Pentaho Data Integration (PDI) Engine. It allows you to manage users and roles (default security) or integrate security to your existing security provider such as LDAP or Active Directory.

For Business Analytics users, the Pentaho Server is bundled with the Pentaho User Console (PUC), a web-based interface which allows you to administer the server. PUC also allows you to create business analytics content, display and schedule reports using a web-based interface, and manage Pentaho security. The following Business Analytics plugins are available through PUC:

| **Plugin Name** | **Description** |
| --- | --- |
| Analyzer | Helps you filter and visualize data to make informed business decisions. |
| Interactive Reports | Creates template-based, on-demand reports in an intuitive, drag-and-drop environment. |
| Dashboard Designer | Allows you to create a dashboard from Interactive and Analyzer reports. You can also include charts, data tables, and URLs to web pages that you want to display. |
| Mobile | Allows you to run and view content on a mobile platform. |

For PDI, the Pentaho Server provides the ability to centrally store and manage your data integration transformations and jobs. It also provides the services allowing you to schedule and monitor scheduled activities, which are accessed from the PDI client (also known as Spoon).

**BA Components**

The BA components consist of the following set of design tools which work with the Pentaho Server:

| **Design Tool Name** | **Description** |
| --- | --- |
| Aggregation Designer | Provides you with a simple interface that allows you to create aggregate tables from levels within the dimensions you specify. Based on these selections, the Aggregation Designer generates the Data Definition Language (DDL) for creating the aggregate tables, the Data Manipulation Language (DML) for populating them, and an updated Mondrian schema which references the new aggregate tables. |
| Metadata Editor | Helps you build Pentaho metadata domains and models. A Pentaho Metadata Model maps the physical structure of your database into a logical business model. These mappings are stored in a centralized metadata repository and allow administrators to create business-language definitions for complex or cryptic database tables, set security parameters, localize data, add calculations, and format report data. |
| Report Designer | Generates highly detailed and print-quality reports using a standalone client. |
| Schema Workbench | Allows you to edit and create multidimensional models. Adds security and complex calculations to the model. |

**DI Components**

The DI components consist of the following PDI client design tool, a set of command line tools, and a web server.

| **Component Type** | **Name** | **Description** |
| --- | --- | --- |
| Design Tool | PDI client (Spoon) | Graphical design environment for modeling Jobs and Transformations. Transformations are metadata models describing the flow of data. Jobs are workflow-like models for coordinating resources, execution and dependencies of data integration activities. It also provides a user interface to the Pentaho Server for managing security and schedules. |
| Command Line Tool | Kitchen | Command line tool for executing jobs modeled in the PDI client. You can use Kitchen to run jobs at a specific time. For instance, you can use Kitchen to write a cron job that will generate a daily sales report at 3:00 a.m. each morning. |
| Command Line Tool | Pan | Command line tool for executing transformations modeled in the PDI client. This is similar to Kitchen, but where Kitchen executes jobs, Pan executes transformations. |
| Web Server | Carte | Carte is a web server that enables remote execution of jobs and transformations. |

**Where to Install Components**

If you are evaluating the Pentaho Suite, we strongly recommend that you install all components on one computer. This enables you to take full advantage of the tutorials and samples we provide to help you evaluate and learn about our products and tools. If you plan to use the Pentaho Suite for development or production, consider distributing components across server and workstation computers. One popular configuration is to install the servers on one computer and the design tools on client workstations, according to analyst requirements. Data Integration plugins which are needed at design and runtime should be installed on the server and on client workstations.

**Select Installation Method**

To determine the best installation method for you, answer the following questions:

* Are you installing the Pentaho Suite to evaluate it or run it in a production environment?
* Do you want to house the Pentaho Repository on the PostgreSQL database that Pentaho supplies? Or would you rather house the Pentaho Repository on another database that you supply such as Oracle or MySQL?
* Do you want to run the Pentaho Server on the version of Tomcat which we supply? Or do you want to deploy the Pentaho Server on your own implementation of Tomcat or on JBoss instead?

As you consider these questions, review the following Installation Decision Table to determine the best installation method for you:

**Pentaho Suite Installation Decision Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Explore Considerations** | **Choose the Best Option For You** | | |
| **[Install the Pentaho Suite Using the Installation Wizard](https://help.pentaho.com/Documentation/7.0/0F0/0G0/030" \o "Install Pentaho Products Using the Installation Wizard)** | **[Manually Install the Pentaho Server](https://help.pentaho.com/Documentation/7.0/0F0/0P0" \o "Manually Install the Pentaho Server)** | **[Install the Pentaho Client Tools](https://help.pentaho.com/Documentation/7.0/0F0/Install_the_Pentaho_Client_Tools" \o "Install Pentaho Client Tools)** |
| **Purpose** | Evaluating the Pentaho Suite. | Rapid development and production use. | Rapid development use on a client machine. |
| **Summary** | **This method installs both BA and DI components.** This method steps you through the process of choosing which Pentaho components to install. It uses an installation wizard and is the quickest and easiest installation option, and includes everything you need to run the Pentaho Suite.  **Note:**We recommend using this installation method for evaluation purposes only | **This method installs the Pentaho Server, BA plugins, and DI plugins.** It requires that you download and install Pentaho installation files. For a production environment, you would use this method to install the Pentaho Server on a server machine while installing design tools on separate client workstations. You must also choose the Pentaho Repository database that you want to use, but you must download and install them yourself. You can choose to use either the web application server Pentaho provides or your own web application server. You would want to consider using your own web application server if you must comply with your company standard database platform or web application server, such as JBoss. | **This method installs design tools only**. For a production environment, you would use this method to install design tools on client workstations while installing the Pentaho Server on a separate server machine. |
| **Installed Components** | When you run the installation wizard, you can choose to install some or all of the following components in the Pentaho Suite:   * Pentaho Server. * BA and DI Design Tools including Report Designer, Schema Workbench, Metadata Editor, Aggregation Designer, Dashboard, and the PDI client. * Utilities, such as Pan, Kitchen, and Carte. * All BA Plugins including Pentaho Mobile, Analyzer, and Interactive Reporting. * Select DI Plugins such as Big Data and Marketplace. | When you manually install the Pentaho Server, you can choose which BA Plugins you want to install (such as Pentaho Mobile, Analyzer, and Interactive Reporting). Select DI plugins such as Big Data and Marketplace are installed by default. | This method installs one or all of the following items:   * BA Design Tools: Report Designer, Schema Workbench, Metadata Editor, Aggregation Designer, and Dashboard. * The PDI client (Spoon). * Utilities, such as Pan, Kitchen, and Carte. * Select DI Plugins such as Big Data and Marketplace. |
| **You Supply** | A computer that meets Pentaho's [operating system and hardware requirements](https://help.pentaho.com/Documentation/7.0/0D0/160/000). | Each of the following items must meet or exceed the requirements in the [supported technologies](https://help.pentaho.com/Documentation/7.0/0D0/160/000) matrix:   * Computer with a supported operating system and hardware configuration. * Oracle Java Runtime Environment (JRE) or Oracle Java Development Kit (JDK). * Pentaho Repository Database (PostgreSQL, MySQL, MS SQL Server or Oracle) You can also use a preexisting Pentaho Repository platform. * Pentaho Repository Database JDBC Drivers (PostgreSQL, MySQL, MS SQL Server, or Oracle). * If you are installing your own web application server, you will need to provide these server installs (JBoss or Tomcat). You can also use a preexisting application server. | A computer that meets Pentaho's [operating system and hardware requirements](https://help.pentaho.com/Documentation/7.0/0D0/160/000), and each of the following items:   * Computer with a supported operating system and hardware configuration. * Oracle Java Runtime Environment (JRE) or Oracle Java Development Kit (JDK). |
| **We Supply** | * Installation Package * Oracle JRE * Repository Platform (PostgreSQL) * Repository Platform JDBC Driver (PostgreSQL) * Web Application Server (Tomcat) | * Installation Package * Optionally, the web application server (Tomcat) | * Installation Package |
| **Technologies Used** | * Tomcat * PostgreSQL | * If you are using the web application server provided by Pentaho, it is Tomcat. * If you are using your own web application server, you must provide either a Tomcat or a JBoss server. * PostgreSQL, MySQL, MS SQL Server, or Oracle | N/A |
| **Expertise** | * Basic computer knowledge. | * Knowledge of your networking environment, including database port numbers if they differ from the default and IP addresses. * Permission to access installation directories. * Root or Administrative access. | * Basic computer knowledge. * Root or Administrative access. |
| **Approximate Installation Time** | 30 minutes | * 60 to 90 minutes if you are using the Pentaho-provided web application server. * 1 to 3 hours if you are installing your own web application server. | 5 - 10 minutes per client tool |

You can download Pentaho software from the [Pentaho website](http://www.pentaho.com/download/) or the [Pentaho Support Portal](https://support.pentaho.com/home).

**Next Steps**

Proceed with the following installation path based on your analysis of the decision table in [Select Installation Method](https://help.pentaho.com/Documentation/7.0/0F0#Select_Installation_Method):

* [Install the Pentaho Suite Using the Installation Wizard](https://help.pentaho.com/Documentation/7.0/0F0/0G0/030)
* [Manually Install the Pentaho Server](https://help.pentaho.com/Documentation/7.0/0F0/0P0)
* [Install the Pentaho Client Tools](https://help.pentaho.com/Documentation/7.0/0F0/Install_the_Pentaho_Client_Tools)

If you need installation help, contact [Pentaho Support](https://support.pentaho.com/home).

**From:** David Kincade   
**Sent:** Wednesday, December 7, 2016 10:45 AM  
**To:** David Coverston <dcoverston@pentaho.com>  
**Subject:** Re: Tech review for DOC-3060

I did the review. I can answer your questions but my comment may make your question irrelevant.

The DI plugins mentioned are not option for installation. The user is not presented with an option to install/ to not install them. They get installed for everyone and it is a manual process to remove them if so desired (this would be rare). So Jens’ comment is that he wants the users to know you will get the DI plugins as well which is good. But the details of the plugins are not needed and they are not optional via the installation process.

Now if you can figure out how to say both of those things, then you are golden. Thank goodness you are a tech writer.

**From:** David Kincade   
**Sent:** Thursday, December 8, 2016 10:17 AM  
**To:** David Coverston <dcoverston@pentaho.com>  
**Subject:** Re: DOC-3060 - another question

I see what you are saying and that is a good catch. The word “select” on the other areas (in blue) indicates we don’t install all available plugins, just the ones we deem important. In the Manual process (middle column), you get the same set. This is not ALL plugins, but again the ones we deem important. So in all 3 cases, we install the same set of DI plugins.

More plugins can be added by either downloading them from the support portal (for supported plugins) or downloaded from the marketplace for non-supported community driven plugins.

This is all too much information for this article. So we just need to have consistent wording which explains that you get the important set of DI plugins in each case (the preferred ones). The rest do not need to be mentioned in this place.

So with “select” meaning the ones that we have chosen, I am good with the items in blue. We just need to work that same concept into the middle column.

**From:** David Coverston <[dcoverston@pentaho.com](mailto:dcoverston@pentaho.com)>  
**Date:** Thursday, December 8, 2016 at 9:25 AM  
**To:** David Kincade <[dkincade@pentaho.com](mailto:dkincade@pentaho.com)>  
**Subject:** DOC-3060 - another question

David,

I have reworded the manual installation description (yellow highlight), but that raises another question for me. You mentioned that all DI the plugins are installed with the manual installation, but are only *some* DI plugins installed with the Wizard or when you choose to install the client tools separately (blue highlight)? Is this correct?

|  |  |  |  |
| --- | --- | --- | --- |
| **Explore Considerations** | **Choose the Best Option For You** | | |
| **[Install the Pentaho Suite Using the Installation Wizard](https://help.pentaho.com/Documentation/7.0/0F0/0G0/030" \o "Install Pentaho Products Using the Installation Wizard)** | **[Manually Install the Pentaho Server](https://help.pentaho.com/Documentation/7.0/0F0/0P0" \o "Manually Install the Pentaho Server)** | **[Install the Pentaho Client Tools](https://help.pentaho.com/Documentation/7.0/0F0/Install_the_Pentaho_Client_Tools" \o "Install Pentaho Client Tools)** |
| **Installed Components** | When you run the installation wizard, you can choose to install some or all of the following components in the Pentaho Suite:   * Pentaho Server. * BA and DI Design Tools including Report Designer, Schema Workbench, Metadata Editor, Aggregation Designer, Dashboard, and the PDI client. * Utilities, such as Pan, Kitchen, and Carte. * All BA Plugins including Pentaho Mobile, Analyzer, and Interactive Reporting. * Select DI Plugins such as Big Data and Marketplace. | When you manually install the Pentaho Server, you can choose which BA plugins you want to install (such as Pentaho Mobile, Analyzer, and Interactive Reporting). All DI plugins are installed by default. | This method installs one or all of the following items:   * BA Design Tools: Report Designer, Schema Workbench, Metadata Editor, Aggregation Designer, and Dashboard. * The PDI client (Spoon). * Utilities, such as Pan, Kitchen, and Carte. * Select DI Plugins such as Big Data and Marketplace. |