



IBM Power Development Platform

Cognos 10 bundle setup guide

ISV Business Strategy
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Abstract

This document explains how to install and configure IBM Cognos Business Intelligence 10.1 on the IBM Power Development Platform (PDP). Specifically, it shows you how to install this preconfigured instance of IBM Cognos Business Intelligence 10.1 along with samples and with DB2 on an IBM AIX operating-system image for development, testing and validation purposes.

Introduction

This preconfigured instance of IBM Cognos Business Intelligence 10.1 also comes with IBM DB2®, IBM HTTP Server 7.0 and the IBM Cognos Business Intelligence 10.1 samples fully installed and configured for immediate use. You can use PDP to develop, test and validate applications by using these products. After reserving your PDP partition, which includes choosing the hardware configuration and operating system, install the IBM Cognos Business Intelligence 10.1 bundle on that partition.

The IBM Cognos Business Intelligence 10.1 bundle contains the following software components:

- IBM Cognos Business Intelligence 10.1 Server - 64 bit version
- IBM Cognos Business Intelligence 10.1 SDK – 64 bit version
- IBM Cognos Business Intelligence 10.1 Samples
- DB2 Workgroup Server Edition 9.7.2
- IBM HTTP Server 7.0

IBM Cognos Business Intelligence 10.1 Server

For IBM Cognos Business Intelligence 10.1 Server, the bundle's product configuration includes the following:

CONTENT MANAGER DATABASE CREATED: A DB2 database name *CM* has been created and configured as the Content Store for the Cognos server.

COGNOS SERVER SECURITY DISABLED: Anonymous access is allowed for all users.

SAMPLES: The Cognos 10 Great Outdoor samples are installed and configured and the report data for the samples is installed in DB2.

DB2 WorkGroup Server Edition 9.7.2

For DB2 WorkGroup Server Edition 9.7.2, the bundle's product configuration includes the following:

DB2 INSTANCE CREATED: An instance with user ID `db2inst1` is created for you. The password of this user is `c10v1p`.

DB2 DATABASES CREATED: A database named *CM* is created as the Content Manager database. A database named *GS_DB* is created for the Great Outdoors samples.

IBM HTTP Server 7.0

CONFIGURATION FILE UPDATED FOR COGNOS SERVER: The web server's configuration file is updated with the modules and aliases required for the web server to act as the front end to the Cognos BI portal.

Installation

The following section provides details about installing the IBM Cognos Business Intelligence 10.1 bundle.

Installation prerequisites

The IBM Cognos Business Intelligence 10.1 bundle requires AIX 6.1 or AIX 7.1 with a 64-bit kernel on IBM POWER7™ processor-based hardware and a minimum of 2GB of RAM. The installation script terminates with an error message if these requirements are not met.

Special considerations for AIX 6.1

By default, PDP images based on AIX 6.1 install the Web based System Manager to allow remote administration via a web browser. This is configured to use Port 80 which is needed for the IBM HTTP Server in the IBM Cognos Business Intelligence 10.1 bundle.

The installation script for the IBM Cognos Business Intelligence 10.1 bundle will disable the Web based System Manager to prevent a port conflict with the IBM HTTP Server.

Installing the IBM Cognos Business Intelligence 10.1 bundle on AIX

Follow the steps listed next to install the IBM Cognos Business Intelligence 10.1 bundle on your AIX system. These are intended as reference only, so you must verify that they are appropriate for your setup.

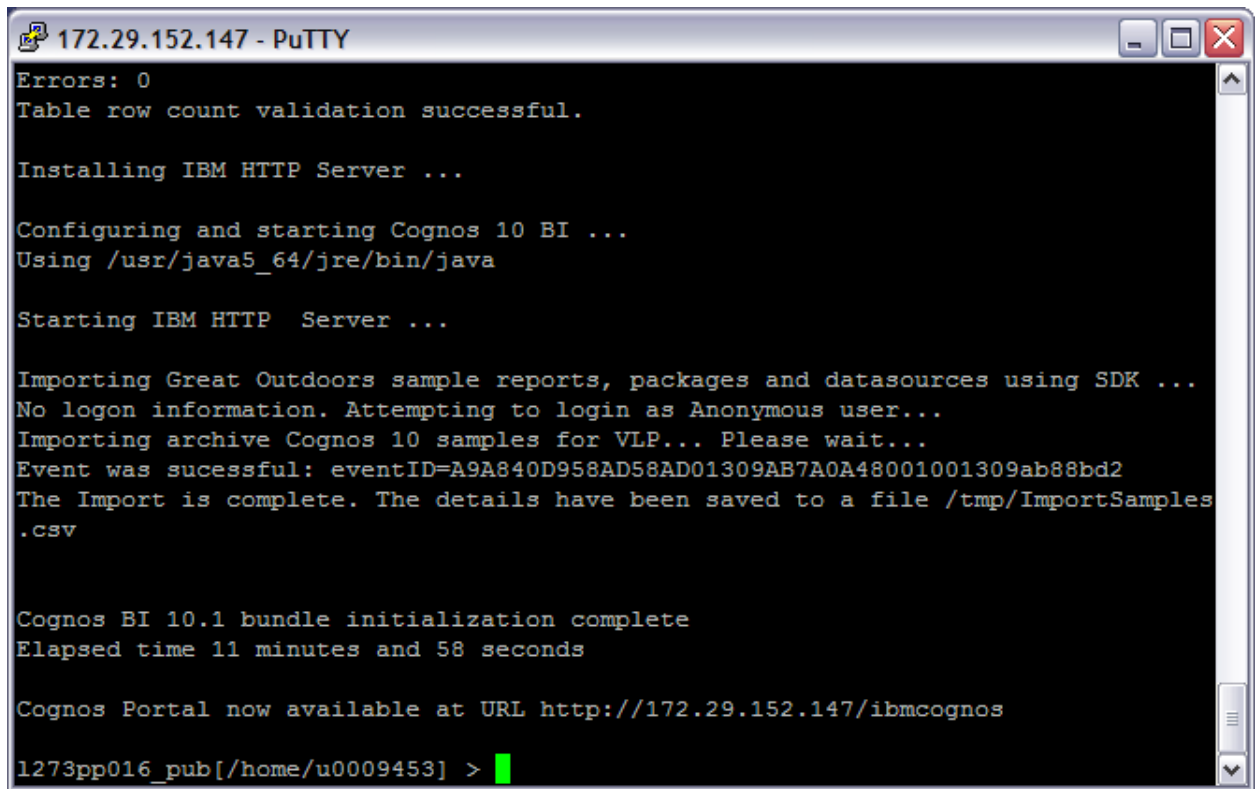
1. Become root by entering the following command:

```
$ su -
```

2. Run the following installation command:

```
# /stage/middleware/cognos/c10_64/setup.sh
```

3. Wait for the script to complete; it runs for several minutes. Wait for a completion message, such as the one shown in **Error! Reference source not found.** before continuing:

A screenshot of a PuTTY terminal window titled "172.29.152.147 - PuTTY". The terminal displays the following text: "Errors: 0", "Table row count validation successful.", "Installing IBM HTTP Server ...", "Configuring and starting Cognos 10 BI ...", "Using /usr/java5_64/jre/bin/java", "Starting IBM HTTP Server ...", "Importing Great Outdoors sample reports, packages and datasources using SDK ...", "No logon information. Attempting to login as Anonymous user...", "Importing archive Cognos 10 samples for VLP... Please wait...", "Event was successful: eventId=A9A840D958AD58AD01309AB7A0A48001001309ab88bd2", "The Import is complete. The details have been saved to a file /tmp/ImportSamples.csv", "Cognos BI 10.1 bundle initialization complete", "Elapsed time 11 minutes and 58 seconds", "Cognos Portal now available at URL http://172.29.152.147/ibmcognos", and a prompt "1273pp016_pub[/home/u0009453] >".

```
172.29.152.147 - PuTTY
Errors: 0
Table row count validation successful.

Installing IBM HTTP Server ...

Configuring and starting Cognos 10 BI ...
Using /usr/java5_64/jre/bin/java

Starting IBM HTTP Server ...

Importing Great Outdoors sample reports, packages and datasources using SDK ...
No logon information. Attempting to login as Anonymous user...
Importing archive Cognos 10 samples for VLP... Please wait...
Event was successful: eventId=A9A840D958AD58AD01309AB7A0A48001001309ab88bd2
The Import is complete. The details have been saved to a file /tmp/ImportSamples.csv

Cognos BI 10.1 bundle initialization complete
Elapsed time 11 minutes and 58 seconds

Cognos Portal now available at URL http://172.29.152.147/ibmcognos

1273pp016_pub[/home/u0009453] >
```

Figure: 1. Completion message

Verifying the installation

After the installation completes, you can access the Cognos web portal for administration and report viewing and report authoring.

- 1.To start using the Cognos web portal, access the following URL from your browser:
http://<vlp-image-ip-address>/ibmcognos
- 4.The welcome page will appear as shown in **Error! Reference source not found.:**

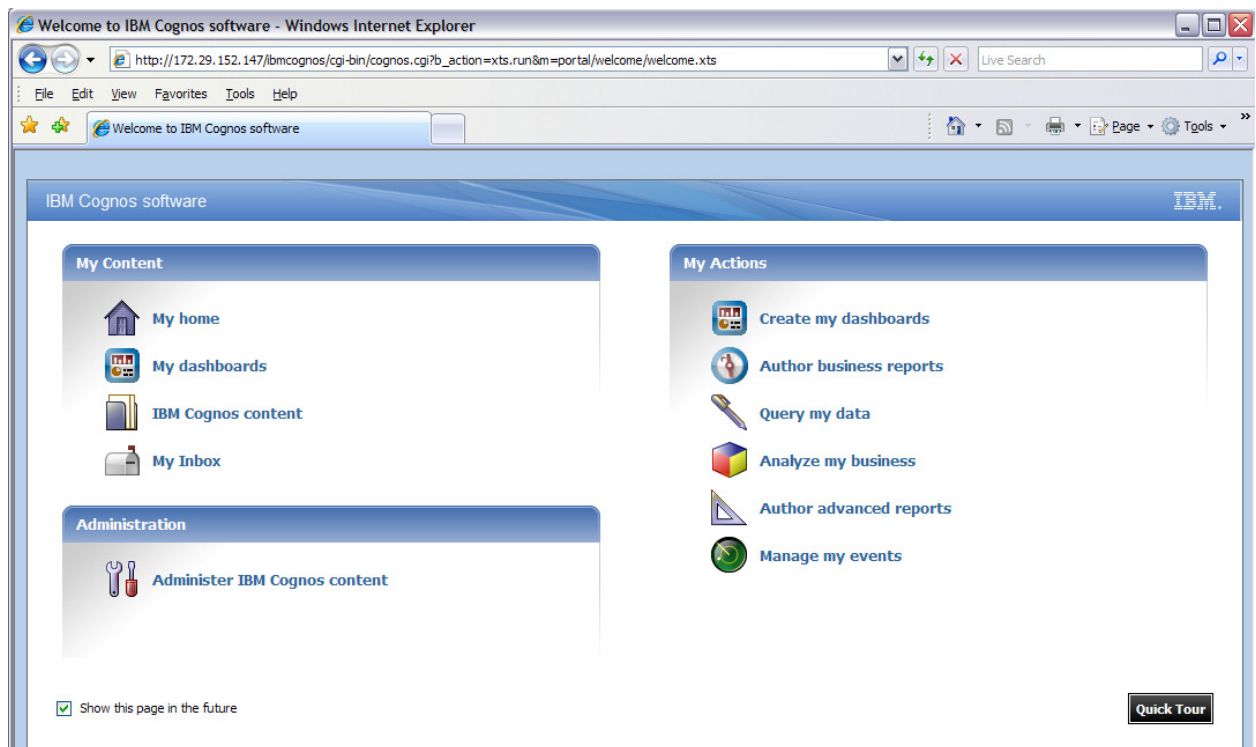


Figure 2. Cognos Portal welcome page

Uninstalling the IBM Cognos Business Intelligence 10.1 bundle on AIX

Follow the steps listed next to completely uninstall the IBM Cognos Business Intelligence 10.1 bundle on your AIX system. These are intended as reference only, so you must verify that they are appropriate for your setup.

5. Become root by entering the following command:

```
$ su -
```

6. Run the following installation command:

```
# /stage/middleware/cognos/c10_64/undo.sh
```

7. Wait for the script to complete; it runs for several minutes. Wait for a completion message that says "Cognos 10 AIX bundle uninstalled" before continuing.

Working with the IBM Cognos Business Intelligence 10.1 bundle

The following sections include useful information for working with the IBM Cognos Business Intelligence 10.1 bundle.

File-system locations

The products in the IBM Cognos Business Intelligence 10.1 bundle are located in the directories listed in the following tables:

Item	Location
Cognos Business Intelligence 10.1 Server	/usr/ibm/cognos/c10_64
Cognos Business Intelligence 10.1 SDK	usr/ibm/cognos/c10_64/sdk

Table: 1. Cognos Business Intelligence 10.1 directories

Item	Location
DB2 Workgroup Server Edition v9.7.2	/opt/IBM/db2/V9.7
Instance home	/home/db2inst1

Table: 2. DB2 Workgroup Server Edition v9.7 directories

Item	Location
IBM HTTP Server 7.0	/usr/IBM/HTTPServer

Table: 3. IBM HTTP Server 7.0 directories

Starting and stopping the Cognos Business Intelligence Server

The IBM Cognos Business Intelligence Server is started when the IBM Cognos Business Intelligence 10.1 bundle is installed. Use the Cognos Configuration utility to manage the state of the server. The utility can run in GUI mode for users that are logged in to the PDP image with VNC and in terminal mode for those accessing via a terminal. In either case some environment variables need to be set for the root user for Cognos Configuration to run correctly:

1. The `JAVA_HOME` environment variable needs to point to a supported JRE. Your PDP image has one at `/usr/java5_64/jre`
2. The DB2 profile script available to the instance user `db2inst1` needs to be run as root to allow access to the DB2 Content Store (CM database)

To run Cognos Configuration in GUI mode to **start or stop** the Cognos server enter the following commands as root in a X Windows based terminal

```
$ export JAVA_HOME=/usr/java5_64/jre
$ . /home/db2inst1/.profile
$ /usr/ibm/cognos/c10_64/bin64/cogconfig.sh
```

To run Cognos Configuration from a terminal to **start** the Cognos server enter the following commands as root at a command prompt

```
$ export JAVA_HOME=/usr/java5_64/jre
$ . /home/db2inst1/.profile
$ /usr/ibm/cognos/c10_64/bin64/cogconfig.sh -s
```

To run Cognos Configuration from a terminal to **stop** the Cognos server enter the following commands as root at a command prompt

```
$ export JAVA_HOME=/usr/java5_64/jre
$ . /home/db2inst1/.profile
$ /usr/ibm/cognos/c10_64/bin64/cogconfig.sh -stop
```

Important: In lieu of the first 2 commands in each of the three command sets above you can add the commands to the *.profile* file of the root user

Starting and stopping the IBM HTTP Server

The IBM HTTP Server is started when the IBM Cognos Business Intelligence 10.1 bundle is installed. The IBM HTTP Server is configured to load a Cognos specific module upon startup. This requires the environment variable *LIBPATH* to be set correctly so the module is loaded properly. In lieu of the *export* command below you can add the command to the *.profile* file of the root user

- Open a secure-shell session and enter the following to start the IBM HTTP Server:

```
$ su -
$ export LIBPATH=$LIBPATH:/usr/ibm/cognos/c10_64/cgi-bin
$ /usr/IBM/HTTPServer/bin/apachectl start
```

- To stop the IBM HTTP Server, enter:

```
$ su -
$ export LIBPATH=$LIBPATH:/usr/ibm/cognos/c10_64/cgi-bin
$ /usr/IBM/HTTPServer/bin/apachectl stop
```

Starting and stopping the DB2 Workgroup Server Edition instance

The DB2 Workgroup Server Edition instance (db2inst1) is started when the IBM Industry Application Platform is installed. The password for db2inst1 is set to *c10v1p*

- Open a secure-shell session and enter the following to start the DB2 Workgroup Server instance:

```
$ su - db2inst1
$ db2start
```

- To stop the DB2 Workgroup Server Edition instance, enter:

```
$ su - db2inst1
$ db2stop
```


Network ports

Error! Reference source not found. is a list of ports that are used for external access to the products in the IBM Cognos Business Intelligence 10.1 bundle. This information is useful if you have to navigate through one or more firewalls to get to the PDP image that is running on the IBM Cognos Business Intelligence 10.1 bundle.

Port number	Description
50000	Port used for external access to DB2 instance
80	Port used for access to Cognos BI portal
9300	Cognos Dispatcher URI for external applications (e.g. Framework Manager)

Table: 4. Ports used for external access to products in the IBM Cognos Business Intelligence 10.1 bundle

Using Cognos Framework Manager with your PDP installation of the Cognos BI Server

Cognos Framework Manager 10.1 is the metadata modeling tool for IBM Cognos Business Intelligence 10.1. It is a 32 bit Windows application and cannot be run on the IBM Cognos Business Intelligence 10.1 bundle on AIX. Users can use locally installed versions of Cognos Framework Manager and then point to the non-modeling components running on the IBM Cognos Business Intelligence 10.1 bundle on the PDP to deploy and test the metadata models. The following are the steps required to do this:

1. Open Framework Manager's Cognos Configuration from the Windows environment on which it is installed
2. Click on 'Environment'.
3. Change the Gateway URI to the following URL

`http://<vlp-image-ip-address>/ibmcognos/cgi-bin/cognos.cgi`

4. Change the Dispatcher for external applications to the following URL

`http://<vlp-image-ip-address>:9300/p2pd/servlet/dispatch`

5. Save the configuration
6. Start Framework Manager

Note: This procedure assumes that you have successfully connected your system that runs Cognos Framework Manager to your PDP image by using the appropriate VPN client.

Applying fixes to the embedded products

Information about applying fixes to the various products in the IBM Industry Application Platform is listed below.

IBM Cognos Business Intelligence 10.1 Server, SDK and Samples can be serviced on the PDP instance of the IBM Cognos Business Intelligence 10.1 bundle just like other native installation of these software products. Corrective service packages, such as interim fixes (which address a particular product issue) or fix packs (which are regular, cumulative roll-ups of interim fixes into a single installable unit) are available to be downloaded from IBM support Cognos 10

From this site, you can search by using problem symptoms and receive information on IBM Technotes, IBM Redbooks® and fixes that might address your problem.

IBM HTTP Server v7.0 can be serviced on the PDP instance of IBM Cognos Business Intelligence 10.1 bundle just like other native installation of this software. Corrective service packages, such as interim fixes or fix packs are available to be downloaded from IBM support for IBM HTTP Server 7.0. From this site, you can search using problem symptoms and receive information on Technotes, Redbooks and fixes that might address your problem.

DB2 Workgroup Server Edition v9.7.2 can be serviced on the PDP instance of the IBM Cognos Business Intelligence 10.1 bundle just like other native installation of this software. Corrective service packages, such as interim fixes or fix packs are available to be downloaded from IBM support for DB2 Workgroup Server Edition 9.7.2. From this site, you can search using problem symptoms and receive information on Technotes, Redbooks and fixes that might address your problem.

Summary

This document discusses the process of installing and configuring the IBM Cognos Business Intelligence 10.1 bundle on PDP. There was a discussion of how to install this preconfigured bundle of IBM Cognos Business Intelligence 10.1, IBM DB2 and IBM HTTP Server on an AIX image for development, testing and validation purposes.

Resources

These web sites provide useful references to supplement the information contained in this document:

- [IBM System p Information Center](http://publib16.boulder.ibm.com/pseries/index.htm)
<http://publib16.boulder.ibm.com/pseries/index.htm>
- [System p on IBM PartnerWorld®](http://ibm.com/partnerworld/systems/p)
ibm.com/partnerworld/systems/p
- [AIX on IBM PartnerWorld®](http://ibm.com/partnerworld/aix)
ibm.com/partnerworld/aix
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https://public.dhe.ibm.com/partnerworld/pub/pdp/pdp_sac_uguide.pdf
- [PDP How-to Web page with tutorials and documents](https://public.dhe.ibm.com/partnerworld/pub/pdp/create_pdp_reservation_guide.pdf)
https://public.dhe.ibm.com/partnerworld/pub/pdp/create_pdp_reservation_guide.pdf
- [Software Mall - IBM Software Access Catalog](http://ibm.com/isv/welcome/softmall.html)
ibm.com/isv/welcome/softmall.html
- [IBM DB2 Workgroup Server Edition v9.7 Information Center](http://publib.boulder.ibm.com/infocenter/db2luw/v9r7/index.jsp)
<http://publib.boulder.ibm.com/infocenter/db2luw/v9r7/index.jsp>
- [IBM HTTP Server v7.0 Information Center](http://ibm.com/software/web servers/http servers/library/)
ibm.com/software/web servers/http servers/library/
- [IBM Cognos Business Intelligence 10.1 Information Center](http://publib.boulder.ibm.com/infocenter/cbi/v10r1m0/index.jsp)
<http://publib.boulder.ibm.com/infocenter/cbi/v10r1m0/index.jsp>

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