

IBM Cognos TM1 Pattern
Version 1.0.0

Installation and Administration Guide



Note

Before using this information and the product it supports, read the information in "Notices" on page 23.

Product Information

This document applies to IBM Cognos TM1 Pattern version 1.0.0 and may also apply to subsequent releases.

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Introduction

IBM® Cognos® TM1® Pattern is a high performance pattern that simplifies the installation and configuration of IBM Cognos TM1. Cognos TM1 Pattern contains a set of virtual system templates that help you to quickly and easily install and deploy an IBM Cognos TM1 topology that meets your business requirements.

This document contains instructions for installing and deploying Cognos TM1 Pattern on IBM PureApplication® System. It also describes the virtual system templates and components that are available in Cognos TM1 Pattern.

Audience

Use this document to install and deploy Cognos TM1 Pattern. You can then use one of the supplied virtual system templates to deploy a preconfigured Cognos TM1 instance or build your own Cognos TM1 deployment.

To work with Cognos TM1 Pattern, you should be familiar with the following:

- administering cloud environments
- database and data warehouse concepts
- reporting concepts

Finding information

To find product documentation on the web and other helpful resources, access IBM Cognos TM1 10.2.2 Knowledge Center (http://www.ibm.com/support/knowledgecenter/SS9RXT_10.2.2/com.ibm.swg.ba.cognos.ctm1.doc/welcome.html). Release Notes are published directly to IBM Knowledge Center and include links to the latest technotes and APARs.

Forward-looking statements

This documentation describes the current functionality of the product. References to items that are not currently available may be included. No implication of any future availability should be inferred. Any such references are not a commitment, promise, or legal obligation to deliver any material, code, or functionality. The development, release, and timing of features or functionality remain at the sole discretion of IBM.

Samples disclaimer

The Sample Outdoors Company, Great Outdoors Company, GO Sales, any variation of the Sample Outdoors or Great Outdoors names, and Planning Sample depict fictitious business operations with sample data used to develop sample applications for IBM and IBM customers. These fictitious records include sample data for sales transactions, product distribution, finance, and human resources. Any resemblance to actual names, addresses, contact numbers, or transaction values is coincidental. Other sample files may contain fictional data manually or machine generated, factual data compiled from academic or public sources, or data used with permission of the copyright holder, for use as sample data to develop sample applications. Product names referenced may be the trademarks of their respective owners. Unauthorized duplication is prohibited.

Accessibility features

Accessibility features help users who have a physical disability, such as restricted mobility or limited vision, to use information technology products. Cognos TM1 Pattern has accessibility features. For information about these features, see “Accessibility features,” on page 21.

IBM Cognos TM1 10.2.2 Knowledge Center (http://www.ibm.com/support/knowledgecenter/SS9RXT_10.2.2/com.ibm.swg.ba.cognos.ctm1.doc/welcome.html) contains an accessible version of this document. PDF documents include no added accessibility features.

Chapter 1. Product overview

IBM Cognos TM1 Pattern is a pattern that simplifies the installation and configuration of an IBM Cognos TM1 environment. It uses reusable and customizable components that collectively make an automation package for the solution deployment. This automation package decreases the time and costs of a solution deployment and shortens the time to value by automatically creating middleware assets.

Cognos TM1 Pattern can be deployed on IBM PureApplication System.

The pattern deploys a virtual system instance that consists of the following products:

IBM Cognos TM1

Enables organizations to optimize performance through advanced planning, analytics, modeling, and reporting. IBM Cognos TM1 applications are supported by its patented, 64-bit, in-memory online analytical processing (OLAP) server, which provides on-demand analytics of complex multidimensional data with real-time analysis and calculation performance.

IBM Java Runtime Environment

Java™ Runtime Environment for running Java applications.

Server components

The IBM Cognos TM1 Pattern includes the following server components:

Cognos TM1 Server

Includes the Cognos TM1 Admin Server and IBM Cognos TM1 Server, the 64-bit, in-memory online analytical processing (OLAP) server.

Cognos TM1 Web

Web-based component that extends the analytical power of Cognos TM1 by helping you to view, analyze, edit, and chart your TM1 data in a web browser. Administrators can also use Cognos TM1 Web to perform some Cognos TM1 administration tasks.

Cognos TM1 Applications

Are the basis for organizing and managing applications. Application modelers can use Cognos TM1 Application Web, Cognos Insight in distributed, or Cognos Insight in connected mode to contribute to their applications. You can start Cognos TM1 Performance Modeler from Cognos TM1 Applications. Cognos TM1 Performance Modeler is used by modelers to plan and build the data structures on which applications are based.

Cognos TM1 Operations Console

Web-based component that is used to monitor the activity of Cognos TM1 servers.

IBM Cognos TM1 Scorecarding

Integrates scorecarding dashboards and strategy management into Cognos TM1. Use IBM Cognos TM1 Performance Modeler to define the key performance indicators (KPIs) to monitor. Use them to build your scorecarding diagrams. The scorecard objects and diagrams you create are stored in your Cognos TM1 server and made accessible to users as

interactive dashboards. This collection of scorecarding features creates a close integration of scorecarding and strategy with planning, analysis, and dashboarding.

Performance Management Hub

REST-based API for TM1 Clients to interact with the TM1 Server.

Client components

The following components are available:

IBM Cognos Insight

A stand-alone tool that helps you to work with complicated data sources in easy to use workspaces. Cognos Insight integrates with IBM Cognos Express®, IBM Cognos TM1, and IBM Cognos Business Intelligence.

IBM Cognos Performance Modeler

Use Cognos TM1 Performance Modeler to build models that use dimensions, cubes, links, and rules. Create applications from cube views, assign workflow, and set up security. You can then deploy, administer, and maintain your applications. You can also import data into Cognos TM1 by using Cognos Performance Modeler.

You can download and install the previously listed components from the IBM Cognos TM1 Applications portal. For more information, see “Accessing the Cognos TM1 web applications” on page 17.

Other components

The following components are available but they are not installed by the pattern:

IBM Cognos TM1 Architect

An older Cognos TM1 modeling tool that supports the creation and maintenance of all TM1 objects. TM1 Architect does not support automatic feeder and rules generation, and does not provide guided import capabilities.

IBM Cognos TM1 Perspectives

The TM1 Excel Add-In. Cognos TM1 Perspectives is an older tool that can be used for both Cognos TM1 model development and for analyzing data by using Microsoft Excel capabilities. Cognos TM1 Perspectives supports the creation and maintenance of all Cognos TM1 objects, but does not provide the advanced capabilities of Cognos Performance Modeler. If you require an Excel Add-In interface and the ability to use Microsoft Excel functionality, such as charting, when you work with TM1 data, you can use Perspectives.

Cognos Analysis for Microsoft Excel

A Microsoft Excel-based tool that professional report authors use to build sophisticated, multiple-sheet, multiple-query reports against multiple databases.

Cognos TM1 Mobile Contributor

A mobile application for the Apple iPad that connects to an IBM Cognos TM1 Server and coexists with other desktop and web applications that connect to the same server. Mobile users can access all their planning applications from IBM Cognos TM1 Applications, view submission status for all approval nodes, and interact with cube views in a grid or chart

format right in the iPad app. Users can also change values on the iPad and submit them back to the plan where the data is updated on the IBM Cognos TM1 server.

TM1 samples

During pattern installation you can choose to install the Cognos TM1 samples. For information about the Cognos TM1 samples, refer to your IBM Cognos TM1 documentation.

Logging

Operations performed in Cognos TM1 Pattern are recorded in log files. Logs are organized by virtual machine name. The log files are stored under the **IBM TM1** category. The log files that are available under this category can vary, based on the Cognos TM1 services provided by the virtual machine. For example, the log files for the web tier are different from the log files for the data tier. For information about accessing and viewing the logs, see the documentation for your system.

Release notes

Release notes provide a list of topics and links that are useful when you install IBM Cognos TM1 Pattern.

To review release notes for installation and configuration issues for IBM Cognos TM1 Pattern, see the IBM Cognos TM1 Release Notes (www.ibm.com/support/docview.wss?uid=swg27043217).

To view other known issues and their workarounds, see the IBM Support portal (www.ibm.com/support).

For more information about finding information on the Support portal, see the IBM Support portal assistance (www.ibm.com/software/support/portal/sp-help.html).

Chapter 2. Cognos TM1 Pattern components and templates

The software components are the building blocks of a virtual system pattern. The IBM Cognos TM1 Pattern templates combine and configure software components to help you to quickly and easily deploy a Cognos TM1 virtual system instance.

Cognos TM1 Pattern components

A virtual system pattern can contain images, scripts, software components, other components, add-ons, and policies. The IBM Cognos TM1 Pattern software components are the building blocks of a Cognos TM1 virtual system pattern.

Software components

Cognos TM1 Pattern provides the following software components for building virtual system patterns:

TM1 All In One

A single-server installation that can be used for proof of concept, test, demonstration, development, and training environments.

TM1 Server

Manages the Cognos TM1 64-bit, in-memory online analytical processing (OLAP) server for Cognos TM1 clients.

TM1 Web

A multi-tiered architecture that enables users to access and interact with Cognos TM1 data by using any supported web browser.

TM1 Custom SSL Certificates

Adds Secure Sockets Layer (SSL) to the Cognos TM1 components.

ibmjre

IBM Java Runtime Environment

Note: You can use your own JRE in your virtual system pattern. Use **Pattern Builder** to configure all the JRE components in your virtual system pattern to use the JRE. Modify the **ibm jre installation directory** attribute for all nodes in the pattern. For information about the version of JRE that is required, see Software Environments for Cognos TM1 (<http://www.ibm.com/support/docview.wss?uid=swg27043712>).

To see the specific configuration attributes for a software component, select **Catalog > Components Definition**.

Add-ons and policies

You can add the following add-ons and policies to a Cognos TM1 virtual system pattern:

Default add disk

If your Cognos TM1 instance needs more disk space, add one or more default add disks to a node. For information about how to add a default add disk, see your system documentation.

Routing policy

If you want to have an Enterprise Load Balancer (ELB), add a routing policy to the TM1WebTier node. For information about how to add a routing policy, see your system documentation.

Fix packs

If you want all your virtual system patterns to be deployed with a fix pack installed, you can add a fix pack component to your pattern. For information about how to add a fix pack component, see “Adding a fix pack component to a system pattern” on page 14.

Cognos TM1 Pattern templates

IBM Cognos TM1 Pattern contains predefined virtual system pattern templates that are configured for various Cognos TM1 topologies.

The Cognos TM1 Pattern virtual system templates combine the Cognos TM1 Pattern components to provide complete Cognos TM1 deployment topologies. You can take advantage of the power and ease-of-use of the Cognos TM1 Pattern virtual system templates by using them to create a Cognos TM1 virtual system instance.

Creating a Cognos TM1 virtual system instance includes the following steps:

1. Review the Cognos TM1 Pattern virtual system templates and choose the one that most closely matches your business requirements.
2. Create a virtual system pattern by using the template.
3. For each node in the virtual system pattern, change memory size, CPUs, disk space, and other properties as required.
4. Customize the virtual system pattern to include components such as SSL and fix packs.
5. Deploy the virtual system pattern to create a virtual system instance.

You can create multiple Cognos TM1 virtual system instances, each one deployed and configured identically by the virtual system pattern.

You can also create your own virtual system patterns by selecting and configuring images, scripts, software components, other components, add-ons, and policies.

TM1 AllInOne template

The TM1 AllInOne template consists of a single tier that contains TM1 Server, TM1 Web, TM1 Applications, Operations Console, and PM Hub. This topology is useful for development purposes and small line-of-business applications that do not require enterprise topologies for failover, scalability, and optimal performance.

The TM1 AllInOne template contains one node, **TM1AllInOne**, that has the following important default property attribute values:

Table 1. TM1DataTier node in the TM1 AllInOne template

Attribute	Default value
Virtual CPUs	2
Memory size (MB)	4096
Password (root)	no default value
Password (virtuser)	no default value

Table 1. *TM1DataTier* node in the *TM1 AllInOne* template (continued)

Attribute	Default value
TM1 Web Application Port	9510
TM1 Server Name	Default
TM1 Server Port	45678
Include samples	not selected
DISK_SIZE_GB (MOUNT_POINT /opt/ibm/tm1)	30 GB
DISK_SIZE_GB (MOUNT_POINT /tm1/data)	50 GB

The node contains properties other than the ones that are listed. The properties that are listed here are the ones that you must review and modify before you deploy a virtual system pattern that is based on the *TM1 AllInOne* template.

TM1 Distributed template

This template consists of a two tier installation. The data tier contains *TM1 Server* and the web tier contains the web components. This topology is used in production environments.

The *TM1 Distributed* template contains two nodes, **TM1WebTier** and **TM1DataTier**, that have the following important default property attribute values:

Table 2. *TM1WebTier* node

Attribute	Default value
Virtual CPUs	2
Memory size (MB)	3072
Password (root)	no default value
Password (virtuser)	no default value
TM1 Web Application Port	9510
DISK_SIZE_GB (MOUNT_POINT /opt/ibm/tm1)	20 GB

Table 3. *TM1DataTier* node in the *TM1 Distributed* template

Attribute	Default value
Virtual CPUs	2
Memory size (MB)	3072
Password (root)	no default value
Password (virtuser)	no default value
TM1 Server Name	Default
TM1 Server Port	45678
Install samples	not selected
DISK_SIZE_GB (MOUNT_POINT /opt/ibm/tm1)	20 GB
DISK_SIZE_GB (MOUNT_POINT /tm1/data)	50 GB

The nodes contain properties other than the ones that are listed. The properties that are listed here are the ones that you must review and modify before you deploy a virtual system pattern that is based on the *TM1 Distributed* template.

TM1 Multiple Data Tiers template

This template is a distributed solution with one web tier and two data tiers. A distributed solution supports multiple solutions on separate Cognos TM1 servers that can be accessed with one web address.

The TM1 Multiple Data Tiers template has three nodes, **TM1WebTier**, **TM1DataTier1**, and **TM1DataTier2**, that have the following important default property attribute values:

Table 4. TM1WebTier node

Attribute	Default value
Virtual CPUs	2
Memory size (MB)	3072
Password (root)	no default value
Password (virtuser)	no default value
TM1 Web Application Port	9510
DISK_SIZE_GB (MOUNT_POINT /opt/ibm/tm1)	20 GB

Table 5. TM1DataTier1 node

Attribute	Default value
Virtual CPUs	2
Memory size (MB)	3072
Password (root)	no default value
Password (virtuser)	no default value
TM1 Server Name	Default
TM1 Server Port	45678
Install samples	not selected
DISK_SIZE_GB (MOUNT_POINT /opt/ibm/tm1)	20 GB
DISK_SIZE_GB (MOUNT_POINT /tm1/data)	50 GB

Table 6. TM1DataTier2 node

Attribute	Default value
Virtual CPUs	2
Memory size (MB)	3072
Password (root)	no default value
Password (virtuser)	no default value
TM1 Server Name	Default
TM1 Server Port	45678
Install samples	not selected
DISK_SIZE_GB (MOUNT_POINT /opt/ibm/tm1)	20 GB
DISK_SIZE_GB (MOUNT_POINT /tm1/data)	50 GB

The nodes contain properties other than the ones that are listed. The properties that are listed here are the ones that you must review and modify before you deploy a virtual system pattern that is based on the TM1 Multiple Data Tiers template.

Chapter 3. Installation

Use the installation checklists to verify that your system meets the prerequisites for installation and that you have all the information you need to install IBM Cognos TM1 Pattern.

Hardware and software requirements

To review an up-to-date list of environments that are supported by Cognos TM1 Pattern, including information about software, operating systems, patches, browsers, web servers, directory servers, database servers, and application servers, see Software Environments for Cognos TM1 (<http://www.ibm.com/support/docview.wss?uid=swg27043712>). If there is a conflict between the information that is provided in the product documentation and the information in the software product compatibility reports, the information in the reports takes precedence.

Before you can install the pattern, you must install the following products:

IBM Java Runtime Environment

Java Runtime Environment for running Java applications

Python

Required to run the pattern

For information about the software version requirements for the previously listed products, see the Software Product Compatibility Reports.

Other requirements

You require access to a computer that uses a Microsoft Windows or Linux operating system where you can download the installation files and connect to the cloud environment.

Installation checklists

Use the installation checklists to plan for IBM Cognos TM1 Pattern installation and deployment.

Preinstallation checklist

There are some tasks that you must do before you install the pattern.

- ___ • Review the supported software environments information. See Software Environments for Cognos TM1 (<http://www.ibm.com/support/docview.wss?uid=swg27043712>).
- ___ • Verify that your hardware and software meet the minimum requirements.
- ___ • Access the Cognos TM1 fix pack document (www.ibm.com/support/docview.wss?uid=swg24038365) to find the Cognos TM1 Pattern download package.
- ___ • Review the documentation and plan your deployment.
- ___ • Review the product Release Notes for the latest information about issues that might impact the product installation or configuration.

Installation checklist

The installation checklist assists you in preparing to install the pattern.

- • Complete the following table with information for the target system:

Table 7. Target system information required during installation

System information	Sample value	Your value
The host name or the IP address of the target system	9.24.207.202	
The user ID and password of a user that can install the pattern type on the target system	<i>psadmin</i> <i>psadminpwd</i>	

- • Get access to a computer that uses either a Windows or Linux operating system where you can access the target system and where you can copy the installation files.

Note: If you are using a computer with a Linux operating system, log in with a non-root user account.

- • Verify that the computer has Java Runtime Environment (JRE) 1.6 or higher and that the PATH environment variable includes the bin directory of the JRE.
- • Download the IBM Cognos TM1 10.2.2.1 fix pack from Fix Central.
- • Ensure that you have the IBM Cognos TM1 10.2.2.0 or later installation kit on your computer. You can download the installation kit from Passport Advantage®.
- • Decompress the package into an empty directory.
- • Install and deploy the pattern type.
- • Enable the pattern type.
- • Create the virtual system pattern and configure the pattern components. You can optionally add an SSL component or a fix pack component to the pattern.
- • Deploy the virtual system to create the virtual system instance.
- • Install other TM1 components.

Post-installation checklist

After you install the pattern on your system, you can access the virtual system instance to verify the deployment and continue to set up your environment.

- • Access the virtual system instance and verify the deployment.
- • Install and configure client tools, such as IBM Cognos Insight and IBM Cognos Performance Modeler.
- • Determine a backup strategy.
- • Depending on your environment, perform other post deployment tasks as required.

Install and deploy the pattern

You must create the virtual system pattern before you can deploy it.

Installation and deployment of the pattern consists of the following steps:

- Before you deploy the pattern, ensure that you are prepared with the required information by reviewing the pattern configuration parameters.

- Upload the pattern type.
- Upload the fix packs if there are any.
- Enable the pattern type to make it available for use.
- Create the Cognos TM1 virtual system pattern that you want to deploy by using **Pattern Builder**.
- Deploy the virtual system pattern to the cloud group where the shared services are running.
- Access and test the Cognos TM1 virtual system.
- Determine a backup strategy.

After the pattern is deployed, there may be additional post deployment tasks that must be performed.

Uploading the pattern type

Before you can install the pattern, you must package and upload the pattern type to your system.

Before you begin

Before you perform this procedure, you must have the following files on your computer:

- IBM Cognos TM1 installation kit for version 10.2.2.0 or later
- IBM Cognos TM1 Pattern installation kit (tm1Pattern.tgz) decompressed

You can perform this procedure on a computer that has a Microsoft Windows or Linux operating system installed.

Procedure

1. Open a command line window and change the directory to the location of the decompressed files in tm1Pattern.tgz.
2. Run install.bat or install.sh. When prompted, enter the following parameters:

Hostname

The host name or IP address of the system

UserID

A user name with administration privileges on your computer

Password

The password for the user name

TM1Installer

The full path and file name to the Cognos TM1 installation kit

3. After the pattern type upload completes, verify that the upload was successful. Click **Cloud > Pattern Types**. Search for the Cognos TM1 Pattern.

What to do next

Enable the pattern type by accepting the license agreement.

Uploading a fix pack

Before you can apply a fix pack to a virtual system pattern or virtual system pattern instance, you must upload it to your system.

Before you begin

Before you perform this procedure, you must have the following files on your computer:

- IBM Cognos TM1 fix pack that you want to install
- IBM Cognos TM1 Pattern install kit (tm1Pattern.tgz) decompressed

You can perform this procedure on a computer that has a Microsoft Windows or Linux operating system installed.

Procedure

1. Open a command-line window and change the directory to the location of the decompressed files in tm1Pattern.tgz.
2. Run packagefix.bat or packagefix.sh. When prompted, enter the following parameters:

Host name or IP address

The host name or IP address of the system

User name

A user name with administration privileges on your computer

Password

The password for the user name

Emergency fix name

Name of the fix pack. This value identifies the fix pack in the system catalog. If the name contains spaces, enclose it in quotation marks.

Tip: Use a meaningful name that clearly identifies the object that the fix pack applies to. A meaningful name helps you to quickly identify the fix pack in the catalog.

TM1 fix installer

The full path and file name to the Cognos TM1 fix pack

Verify that the fix pack matches the TM1 version that you are applying it to

Type yes to continue or no to exit the script.

3. After the fix pack upload completes, verify that the upload was successful. Click **Catalog > Emergency Fixes** and verify that the fix pack is there.

Enabling the pattern type

To use IBM Cognos TM1 Pattern, you must accept the license agreement and enable the pattern type.

Before you begin

Important: IBM Foundation Pattern is a prerequisite for all other pattern types. The foundation pattern must be made available before you can accept the license agreement for the web system pattern type. For more information about the IBM Foundation Pattern, see your system documentation.

Procedure

To accept the license agreement, follow these steps:

1. Click **Cloud > Pattern Types**.

2. Under **Pattern Types**, click the **IBM Cognos TM1 Pattern** pattern type.

Tip: You can filter the list of pattern types by typing a keyword in the filter field.

3. In the **License Agreement** field, click **Accept**.
4. After you read the license agreement, click **Accept**. The license agreement changes to **Accepted**.
5. Click **Enable**. The status changes to **Available**.

What to do next

You can now use the pattern to build a virtual system.

Creating and deploying a virtual system pattern

Use the Pattern Builder to select a virtual system template and then create and deploy a virtual system pattern.

Before you begin

You must be granted access to patterns, access to create patterns, or have the **Workload resources administration** role with full permissions to complete this task.

About this task

To create a virtual system pattern, use Pattern Builder. You can select one of the Cognos TM1 Pattern templates. These templates are preconfigured for common Cognos TM1 deployments. These templates simplify the deployment of Cognos TM1 because they contain key components that can be easily overlooked, such as fix packs and disk space.

You can also create a virtual system pattern by selecting and configuring individual components. For information about how to create a virtual system pattern by selecting and configuring individual components, see your system documentation.

When a virtual system is deployed, the system allocates necessary resources, such as virtual machines and block storage on the cloud infrastructure. The system also deploys, configures, and starts the virtual system components in the cloud.

The deployment time for a virtual system depends on factors such as the size and interdependences of the virtual system pattern components, network usage, storage usage, and the provisioning speed of the virtual machine.

Note: Connectivity issues with the DNS server can cause increased deployment times or failed deployments. Ask your network administrator for the target network to check the routing tables of the DNS server to ensure that it can resolve the network address of the system.

Procedure

1. Click **Patterns > Virtual Systems**.
2. Click **Create New**.

3. Type a name and version number for the pattern and click one of the Cognos TM1 Pattern templates. You can also click **Blank pattern** to create your own pattern.
4. Click **Start Building**. The TM1 deployment for the template that you selected displays in the canvas.

Note: If you clicked **Blank pattern**, a blank canvas displays. To build your virtual system, drag components into the canvas.

5. Verify the default values of the properties for a component by clicking a component in the canvas. You can change the values to meet your business requirements. For example, to modify the disk space for a node, click the **Default add disk** component and change the **DISK_SIZE_GB** value. For information about which properties to verify for each Cognos TM1 Pattern template, see “Cognos TM1 Pattern templates” on page 6.
6. Enter root and virtuser passwords for each node.
7. If you want to install the Cognos TM1 samples, select the **Include samples** check box in the TM1 Server component.
8. If you want all instances of this system pattern to be deployed with a fix pack, you can apply an **iFix policy** component to the pattern. For information about how to apply an **iFix policy** component to a pattern, see “Adding a fix pack component to a system pattern.”
9. If you want all instances of this system pattern to use SSL, you can apply the **TM1 Custom SSL Certificates** component to the pattern. For information about how to apply the **TM1 Custom SSL Certificates** component to the pattern, see “Adding an SSL component to a system pattern” on page 15.
10. Click **Save**.
11. Click **Patterns > Virtual Systems**.
12. Click the virtual system pattern that you created and click **Deploy**.
13. Click **Quick Deploy**.

Note: For information about other deployment options, see your system documentation.

When the virtual system is deployed, the virtual system instance is listed under the **Instances** section of the workload console. To view the virtual system instance, click **Instances > Virtual Systems**. Verify that the status of the virtual system instance is **Running**.

Results

The virtual system pattern is created and an instance of the virtual system is deployed.

Adding a fix pack component to a system pattern

If you want a fix pack to be applied to all future instances of a system pattern, add the fix pack component to the system pattern.

Before you begin

Before you perform this task, the fix pack that you want to add must be in the system catalog. For information about how to upload a fix pack to the system catalog, see “Uploading a fix pack” on page 11.

About this task

To perform this task, you must be working in the **Pattern Builder** with a system pattern.

Procedure

1. In the canvas, click **Add policy to pattern > iFix policy**.
2. In the **iFix policy** properties, select a fix pack from the list. The fix pack displays under **Applied fixes**.
3. Save the pattern.

Results

The fix pack will be applied to all future instances of this pattern.

Adding an SSL component to a system pattern

If you want all instances of the Cognos TM1 pattern to use Secure Sockets Layer (SSL), add the TM1 Custom SSL Certificates component to the system pattern.

Before you begin

You must have the following files on your computer:

- A pkcs12 file (in .p12 format) that contains the private key and server certificate for IBM Cognos TM1 Server.
- A file in .pem format that contains the certificate authority for Cognos TM1 Server.
- A pkcs12 file (in .p12 format) that contains the private key and server certificate for Cognos Planning Service.

You must also have the following passwords and IDs:

- The private keystore password for the Cognos TM1 Server. This is the password that unlocks the keystore.
- The SSL certificate ID for the Cognos TM1 Server
- The private keystore password for the Cognos Planning Service. This is the password that unlocks the keystore.

About this task

To perform this task, you must be working in the **Pattern Builder** with a system pattern. Perform the following steps on all nodes in the pattern.

Procedure

1. Click and drag the TM1 Custom SSL Certificates component to a node. The TM1 Custom SSL Certificates properties pane opens.
2. To configure SSL on a **TM1WebTier** node, enter values for the Cognos Planning Service properties only. Leave the Cognos TM1 Server properties blank.
3. To configure SSL on a **TM1DataTier** node, enter values for the Cognos TM1 Server properties only. Leave the Cognos Planning Service properties blank.

Note: The **TM1 AllInOne** template has the **TM1WebTier** and **TM1DataTier** on one node, so you must configure both the Cognos Planning Service and Cognos TM1 Server properties for it.

4. For the TM1 AllInOne template, enter values for both the Cognos Planning Service and the Cognos TM1 Server.
5. Click **Ordering**.
6. Drag the TM1 Custom SSL Certificates box to the end of the list.
7. Click **Save**.

Results

SSL will be applied to all future instances of this pattern.

Chapter 4. Deployed virtual systems

After your virtual system pattern is deployed, you can perform post-deployment tasks.

Applying a fix pack to a deployed virtual system instance

If you did not apply a fix pack to the virtual system pattern before you deployed the system pattern, you can apply it after the virtual system pattern instance is deployed.

Before you begin

Before you perform this task, the fix pack that you want to apply must be in the system catalog. For information about how to upload a fix pack to the system catalog, see “Uploading a fix pack” on page 11.

Procedure

1. Click **Instances > Virtual Systems**
2. Select the virtual system instance that you want to apply the fix pack to.
3. On the toolbar click **Manage**.
4. In the Instance Console window, click the **Operations** tab.
5. On the **Operations** page, select **MAINTENANCE** in the list.
6. Expand **Maintenance fixes**.
7. In the drop-down list, select the fix pack that you want to apply.
8. Click **Submit**.

Results

The fix pack displays in the **Maintenance fixes** list for the virtual system instance that you applied it to.

Tip: You can roll back a fix pack by restoring a snapshot. For more information about how to restore a snapshot, see your system documentation.

Accessing the Cognos TM1 web applications

After your virtual system pattern is deployed, you can access the IBM Cognos TM1 web applications from the virtual system instance.

About this task

Access points to the TM1 web applications are known as *endpoints*.

The IBM Cognos TM1 Applications endpoint provides access to Cognos Insight and Cognos Performance Modeler.

For information about the Cognos TM1 web applications, see IBM Cognos TM1 10.2.2 Knowledge Center (http://www.ibm.com/support/knowledgecenter/SS9RXT_10.2.2/com.ibm.svg.ba.cognos.ctm1.doc/welcome.html).

Procedure

1. Click **Instances > Virtual Systems**.
2. Click a virtual system instance.
3. Scroll down to **Virtual machine perspective** and expand it.
4. Expand **TM1WebTier**.
5. Scroll down to **Consoles**.
6. Click one of the following links to access the web application:
 - **IBM Cognos TM1 Web**
 - **IBM Cognos TM1 Applications**
 - **IBM Cognos TM1 Operations Console**

Chapter 5. Import and transfer data

You can import data into your IBM Cognos TM1 virtual system pattern instance by using Cognos TM1 client tools. For large amounts of data, you can run a script to upload a file and then use Cognos TM1 client tools to import it.

You can import data into Cognos TM1 by using one of the following methods:

Use Cognos TM1 tools

Use this method if you have dimensional data to import. You can use Cognos Performance Modeler or Cognos TurboIntegrator to import the data into Cognos TM1.

Bulk upload

For large amounts of data, you can upload a .csv file to the data tier and then use a script to import it into Cognos TM1.

For more information about how to import and transfer data into Cognos TM1, see IBM Cognos TM1 10.2.2 Knowledge Center (http://www.ibm.com/support/knowledgecenter/SS9RXT_10.2.2/com.ibm.swg.ba.cognos.ctm1.doc/welcome.html).

Importing data into Cognos TM1

You can import large amounts of data into IBM Cognos TM1 by copying a .csv file to the data tier. Then, you can use Cognos Performance Modeler or Cognos TurboIntegrator to import it into Cognos TM1.

Before you begin

Before you perform this task, you must have access to an SFTP client. You must also know the following information:

- The password for the virtusr user on the TM1 Server virtual machine
- Host name or IP address of the TM1 Server virtual machine

About this task

For information about how to use Cognos Performance Modeler or Cognos TurboIntegrator, see IBM Cognos TM1 10.2.2 Knowledge Center (http://www.ibm.com/support/knowledgecenter/SS9RXT_10.2.2/com.ibm.swg.ba.cognos.ctm1.doc/welcome.html).

Procedure

1. Connect to the TM1 Server virtual machine on the data tier by using your SFTP client.
2. Create a temporary directory on /tm1/data and copy the .csv file to it.
3. Use Cognos Performance Modeler or Cognos TurboIntegrator to upload the data to the TM1 Server.

Appendix. Accessibility features

Accessibility features help users who have a physical disability, such as restricted mobility or limited vision, to use information technology products.

For information about the commitment that IBM has to accessibility, see the IBM Accessibility Center (www.ibm.com/able).

Keyboard navigation

This product uses standard browser navigation keys.

The Pattern Builder is not keyboard accessible. If you need to work with virtual system patterns without using a mouse, you can use the command-line interface provided by your system or the REST API.

IBM Cognos TM1 software

For information about accessibility of the Cognos TM1 software, see IBM Cognos TM1 10.2.2 Knowledge Center (http://www.ibm.com/support/knowledgecenter/SS9RXT_10.2.2/com.ibm.svg.ba.cognos.ctm1.doc/welcome.html).

IBM Cognos HTML documentation has accessibility features. PDF documents are supplemental and, as such, include no added accessibility features.

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