

IBM Cognos Express  
Version 10.2.1

*Software Development Kit*



**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 Express Version 10.2.1 and may also apply to subsequent releases.

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## Chapter 1. Cognos Express and the Cognos Software Development Kit

The IBM® Cognos® Software Development Kit is now available for IBM Cognos Express® customers. The Cognos Software Development Kit is a collection of web services, libraries, programming interfaces, and sample programs that you can use to access the full functionality of your Cognos Express software.

The Cognos Software Development Kit is not customized for Cognos Express customers and documents some features that are not applicable in a Cognos Express environment. Cognos Express customers must consider some issues before they use the Cognos Software Development Kit. Some of the components of the Cognos Software Development Kit are only partially or not at all applicable for Cognos Express customers.



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## Chapter 2. Before you begin

There are a number of issues that IBM Cognos Express customers should consider before starting to use the IBM Cognos Software Development Kit.

### Cognos Express URLs

Many Cognos Software Development Kit components use URLs to communicate with the Cognos server. These components use the gateway URL, which is of the form `http://webservername/ibmcognos/parameters...`

You can modify these URLs so they do not use the Cognos Express gateway. A URL that is documented in the Cognos Software Development Kit as

```
http://<webservername>/ibmcognos/cgi-bin/cognos.cgi<parameters...>
```

should be replaced with

```
http://<webservername>:<portnumber>/p2pd/servlet/dispatch<parameters...>
```

where `<portnumber>` is the start of the range of ports specified when you installed Cognos Express. The default port number is 19300.

Alternatively, you can install the Cognos Express gateway as described in the topic on installing and configuring the Cognos Express gateway in *IBM Cognos Express Managing IBM Cognos Express*. In this case, the modified URLs will look like

```
http://<webservername>/IBMCognosExpress/cgi-bin/cognos.cgi<parameters...>
```

if you use the default web directory alias.

**Important:** You must install the Cognos Express gateway if you want to use the Cognos Software Development Kit Active Server Pages samples or the Cognos Mashup Service JavaScript samples.

### UNIX and Linux operating systems

Cognos Express customers should ignore instructions on installing and using Cognos Software Development Kit components on UNIX and Linux operating systems since Cognos Express can be used on Microsoft Windows operating systems only.

### Upgrading applications

Cognos Express customers should ignore topics on upgrading SDK applications as these topics are not applicable for Cognos Express.

### Sample programs

In order to use the sample programs included with the Cognos Software Development Kit, you must install the sample databases and reports provided with Cognos Express. For instructions on installing the Cognos Express samples, see the topic on setting up the Cognos Express samples in *IBM Cognos Express Managing IBM Cognos Express*.

## Unsupported features in Cognos Express

The *IBM Cognos Express New Features Guide* lists IBM Cognos Business Intelligence features that are not supported in Cognos Express. Cognos Software Development Kit methods that use these unsupported features are not supported for Cognos Express customers.



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## Chapter 3. Installing the Cognos Software Development Kit

After you install and configure IBM Cognos Express, you can install and configure the IBM Cognos Software Development Kit.

### Procedure

1. Create a file called `altname.ini` in the `%TEMP%` folder. The contents of this file are as follows:

```
[Rendition]
Name=cxsrvr10dot2dot1
Description=IBM Cognos Express
Folder=Cognos Express
Company=IBM
```

You can type `%TEMP%` into Windows Explorer or the open/save dialog box of a text editor and the appropriate folder will be opened.

2. Follow the instructions in the *IBM Cognos Software Development Kit Installation and Configuration Guide* to install and configure the Cognos Software Development Kit. Install the Cognos Software Development Kit in the Cognos Express installation location.
3. Recreate the `altname.ini` from the first step. (The original version was deleted during the installation of the Cognos Software Development Kit.)
4. Download the Cognos BI SDK 10.2.1 Updater Kit for Cognos Express Interim Fix 1 (IFIX 1) from IBM Support Fix Central (<http://www.ibm.com/support/fixcentral/>).
5. Extract the files from the Updater Kit and run the following command from a command prompt:  

```
<extract_location>\winx64h\issetup.exe -nobackup
```

where `<extract_location>` is the location where you extracted the files.
6. Restart the server.
7. If you want to use the Cognos Software Development Kit Active Server Pages samples or the Cognos Mashup Service JavaScript samples, do the following steps.
  - a. Install the Cognos Express Gateway. For instructions, see the topic on installing and configuring the Cognos Express gateway in *IBM Cognos Express Managing IBM Cognos Express*.
  - b. Copy the `samples` folder from the `webcontent` folder of the Cognos Express installation location to the `webcontent` folder of the Cognos Express Gateway location.



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## Chapter 4. Cognos Software Development Kit components applicability for Cognos Express customers

The following topics describe how the IBM Cognos Software Development Kit components are supported for IBM Cognos Express customers.

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### Cognos Software Development Kit

The IBM Cognos Software Development Kit is supported for IBM Cognos Express customers. Customers who plan to use the Cognos Software Development Kit must take into account the following considerations when using the *IBM Cognos Software Development Kit Developer Guide*.

#### Authenticating users

Unlike IBM Cognos Business Intelligence, which allows anonymous access to the Cognos Business Intelligence server as well as a variety of built-in and third-party authentication providers, Cognos Express allows authenticated server access using at most two authentication methods. These authentication methods are as follows:

- The built-in authentication method which has a namespace name of Cognos Express and a namespace ID of CognosExpress.
- The optional Active Directory authentication method which has the namespace name specified when it was configured and a namespace ID of CognosExpressActiveDirectoryID.

#### Services

The dataAdvisorService and EVService services are specific to Cognos Express and are not documented in the *IBM Cognos Software Development Kit Developer Guide*. The following services available to Cognos Business Intelligence are not available in Cognos Express:

- agentService
- dataIntegrationService
- dataMovementService
- dimensionManagementService
- indexDataService
- indexSearchService
- indexUpdateService
- metricsManagerService
- migrationService
- planningDataService
- planningAdministrationConsoleService
- planningRuntimeService
- planningTaskService
- powerPlayService

## Methods

All methods documented in the *IBM Cognos Software Development Kit Developer Guide* are associated with one or more services. All methods associated with services available in Cognos Express are available, except for dataAdvisorService and EVService service methods.

## Classes

Some classes are associated with specific services. These classes are not available to Cognos Express SDK applications if the associated service is not available.

## Code samples and language-specific coding practices

Some of the sample programs described in this topic assume a Dispatcher port number of 9300, which is the default for Cognos Business Intelligence. This should be replaced with the Cognos Express Dispatcher port number.

You must install the Cognos Express Gateway in order to use the Active Server Pages samples.

The following sample programs mentioned in this topic do not work with Cognos Express installations.

- Java Server Page (JSP) samples
  - None of the JSP sample programs will work in a Cognos Express environment.
- Java samples
  - Agents
  - DispatcherControl
  - TestDIMS
  - TesterQueryService (not mentioned in the *IBM Cognos Software Development Kit Developer Guide*)
- C# .NET sample
  - ReportParameters

## Performing tasks in Cognos Business Intelligence using URLs

URLs that are documented in this topic must be modified to work with Cognos Express. See “Cognos Express URLs” on page 3 for more information.

## Advanced settings configuration

Advanced settings for the agent service and the metric manager service are not supported for Cognos Express.

## Initial content store settings

The following predefined content store objects, documented in the *IBM Cognos Software Development Kit Developer Guide*, are not available in Cognos Express.

- Capability
  - Administration
    - Metric Studio Administration
    - Planning Administration

- PowerPlay Servers
- Analysis Studio
- Collaborate *and child objects*
- Data Manager
- Event Studio
- External Repositories *and child objects*
- Glossary
- Metric Studio *and child object*
- Planning Contributor
- PowerPlay Studio
- Directory
  - Cognos
    - Adaptive Analytics Administrators
    - Adaptive Analytics Users
    - Analysis Users
    - Authors
    - Cognos Insight Users
    - Consumers
    - Controller Administrators
    - Controller Users
    - Data Manager Authors
    - Directory Administrators
    - Express Authors
    - Library Administrators
    - Metrics Administrators
    - Metrics Authors
    - Metrics Users
    - Mobile Administrators
    - Mobile Users
    - Planning Contributor Users
    - Planning Rights Administrators
    - Portal Administrators
    - PowerPlay Administrators
    - PowerPlay Users
    - Query Users
    - Readers
    - Report Administrators
    - Server Administrators
- Portal
  - Administration
    - Pagelets
      - Console
        - Index Search *and child objects*
        - Library *and child objects*
    - Portlets

- IBM Cognos Go! Search *and child objects*
- IBM Cognos Go! Search Admin *and child objects*
- Connection
  - Portlets
    - IBM Cognos Metric Studio *and child objects*

The following predefined content store objects are available in Cognos Express but are not documented in the *IBM Cognos Software Development Kit Developer Guide*. The search path for each object is also shown.

- Capability
  - EVStudio
    - Search path**  
/capability/securedFunction[@name='EVStudio']
- Directory
  - Cognos
    - Express Administrators
      - Search path**  
CAMID("Express Administrators")
    - Express Architect Users
      - Search path**  
CAMID("Express Architect Users")
    - Express Data Advisor Users
      - Search path**  
CAMID("Express Data Advisor Users")
    - Express Framework Manager Users
      - Search path**  
CAMID("Express Framework Manager Users")
    - Express Users
      - Search path**  
CAMID("Express Users")
    - Express Xcelerator Client Users
      - Search path**  
CAMID("Express Xcelerator Client Users")
  - Cognos Express
    - Search path**  
CAMID("CognosExpress")
    - Cognos Express Administrator
      - Search path**  
CAMID("CognosExpress:administrator")
    - My Folders
      - Search path**  
CAMID("CognosExpress:administrator")/folder[@name='My Folders']
    - Most Recently Used list

**Search path**

```
CAMID("CognosExpress:administrator")/mruFolder[@name='Most Recently Used list']
```

- My Watch Items

**Search path**

```
CAMID("CognosExpress:administrator")/subscriptionFolder[@name='My Watch Items']
```

- Portal

- Administration

- Pagelets

- Console

- Mobile

**Search path**

```
/portal/portalPackage[@name='Administration']/pageletFolder[@name='Pagelets']/pageletFolder[@name='Console']/pageletFolder[@name='Mobile']
```

- Remote Configuration

**Search path**

```
/portal/portalPackage[@name='Administration']/pageletFolder[@name='Pagelets']/pageletFolder[@name='Console']/pageletFolder[@name='Mobile']/pagelet[@name='Remote Configuration']
```

- content

**Search path**

```
/portal/portalPackage[@name='Administration']/pageletFolder[@name='Pagelets']/pageletFolder[@name='Console']/pageletFolder[@name='Mobile']/pagelet[@name='Remote Configuration']/portletInstance[@name='content']
```

- Portlets

- IBM Cognos Mobile Admin

**Search path**

```
/portal/portalPackage[@name='Administration']/portletFolder[@name='Portlets']/portletProducer[@name='IBM Cognos Mobile Admin']
```

- Remote Configuration

**Search path**

```
/portal/portalPackage[@name='Administration']/portletFolder[@name='Portlets']/portletProducer[@name='IBM Cognos Mobile Admin']/portlet[@name='Remote Configuration']
```

- Connection

- Portlets

- IBM Cognos Express Advisor

### Search path

```
/portal/portalPackage[@name='Connection']/  
portletFolder[@name='Portlets']/portletProducer[@name='IBM  
Cognos Express Advisor']
```

– Advisor

### Search path

```
/portal/portalPackage[@name='Connection']/  
portletFolder[@name='Portlets']/  
portletProducer[@name='IBM Cognos Express  
Advisor']/portlet[@name='Advisor']
```

Object permission in Cognos Express differ from what is documented in the *IBM Cognos Software Development Kit Developer Guide*. The initial object permissions in Cognos Express are shown here for each object.

• /

securityObject	permissions
Express Administrators	X R T
Everyone	X R T

– Administration

securityObject	permissions
Express Administrators	X R sP T W

– Capability

securityObject	permissions
Express Administrators	sP T
Everyone	T

- Adaptive Analytics

securityObject	permissions
Express Administrators	X sP T
Express Users	X T

- Administration

securityObject	permissions
Express Administrators	X T

• Adaptive Analytics Administration

securityObject	permissions
Express Administrators	X sP T

• Administration tasks

securityObject	permissions
Express Administrators	X T



- Configure and manage the system

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X T

- Controller Administration

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X sP T

- Data Source Connections

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X sP T

- Distribution Lists and Contacts

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X sP T

- Mobile Administration

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X sP T

- Printers

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X sP T

- Run activities and schedules

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X T

- Set capabilities and manage UI profiles

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X sP T

- Styles and portlets

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X T

- Users, Groups, and Roles

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X sP T

- Cognos Insight

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X sP T
Express Users	X T

- Cognos Viewer *and child objects*

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X T
Express Users	X T

- Controller Studio

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X sP T
Express Users	X T

- Detailed Errors

<b>securityObject</b>	<b>permissions</b>
Express Administrators	sP T

- Drill Through Assistant

<b>securityObject</b>	<b>permissions</b>
Express Administrators	sP T
Express Users	X T

- Execute Indexed Search

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X sP T
Express Users	X T

- Executive Dashboard *and child objects*

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X sP T
Express Users	X T

- Hide Entries

<b>securityObject</b>	<b>permissions</b>
Express Administrators	sP T

- Import relational metadata

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X sP T

- Lineage

securityObject	permissions
Express Administrators	X T
Express Users	X T

- Manage own data source signons

securityObject	permissions
Express Administrators	sP T

- Mobile

securityObject	permissions
Express Administrators	X sP T
Express Users	X T

- Query Studio *and child objects*

securityObject	permissions
Express Administrators	X T
Express Users	X T

- Report Studio

securityObject	permissions
Express Administrators	X T
Express Users	X T

- Allow External Data

securityObject	permissions
Express Administrators	sP T

- Bursting

securityObject	permissions
Express Administrators	X T

- Create/Delete

securityObject	permissions
Express Administrators	X T
Express Users	X T

- HTML Items in Report

securityObject	permissions
Express Administrators	X T

- User Defined SQL

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X T

- Scheduling *and child objects*

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X T
Express Users	X T

- Self Service Package Wizard

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X sP T

- Set Entry-Specific Capabilities

<b>securityObject</b>	<b>permissions</b>
Express Administrators	sP T

- Specification Execution

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X T
Express Users	X T

- Watch Rules

<b>securityObject</b>	<b>permissions</b>
Express Administrators	sP T
Express Users	X T

- Library

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Express Users	X R T

- Visualizations

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Express Users	X R T

- Configuration

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Express Users	X T

- User Profile *and child objects*

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Express Users	X R T

- 11x17

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Express Users	X R T

- A3

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Express Users	X R T

- A4

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Express Users	X R T

- B4 JIS

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Express Users	X R T

- B5 JIS

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Express Users	X R T

- Legal

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Express Users	X R T

- Letter

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Express Users	X R T

- User Interface Profiles

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W

securityObject	permissions
Express Users	X R T

- Report Studio Profiles

securityObject	permissions
Express Users	X T

- Professional

securityObject	permissions
Express Users	X T

- Public Folders

securityObject	permissions
Express Administrators	X R T
Express Architect Users	X R T W
Express Data Advisor Users	X R T W
Express Framework Manager Users	X R T W
Express Xcelerator Client Users	X R T W
Everyone	X R T

- Directory

securityObject	permissions
Express Administrators	T
Everyone	T

- Cognos

securityObject	permissions
Express Administrators	X R sP T W
Everyone	X R T

- All Authenticated Users

securityObject	permissions
All Authenticated Users	X R T

- Anonymous and child objects

securityObject	permissions
Express Administrators	X R sP T W
Anonymous	X R T
Everyone	R T

- System Administrators

<b>securityObject</b>	<b>permissions</b>
System Administrators	X R sP T W

- Express Administrators

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X T

- Express Architect Users

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Everyone	X R T

- Express Data Advisor Users

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Everyone	X R T

- Express Framework Manager Users

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Everyone	X R T

- Express Users

<b>securityObject</b>	<b>permissions</b>
Express Users	X R T
All Authenticated Users	R T

- Express Xcelerator Client Users

<b>securityObject</b>	<b>permissions</b>
Express Administrators	X R sP T W
Everyone	X R T

- Cognos Express

<b>securityObject</b>	<b>permissions</b>
Cognos Express	R T
Everyone	T

- Cognos Express Administrator *and child objects*

<b>securityObject</b>	<b>permissions</b>
Cognos Express Administrator	X R sP T W
Express Administrators	X R sP T W

- Tenants

securityObject	permissions
Express Administrators	T
Everyone	T

- Portal and child objects

securityObject	permissions
Express Administrators	X R T
Everyone	X R T

- Transient

securityObject	permissions
Express Administrators	X R sP T W
Everyone	X R sP T W

## SAP BW support

Cognos Express customers must ignore the topics about SAP BW custom properties because SAP BW is not supported in Cognos Express.

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## Cognos Custom Authentication Provider

The IBM Cognos Custom Authentication Provider is not supported for IBM Cognos Express customers.

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## Dynamic Cubes API

The Dynamic Cubes API is not supported for IBM Cognos Express customers.

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## Framework Manager API

The Framework Manager API is supported for IBM Cognos Express customers. Customers who plan to use the Framework Manager API must take into account the following considerations when using the *IBM Cognos Software Development Kit Framework Manager Developer Guide*.

### Script player

The Script player application (described in the topic on running action logs) is not applicable for Cognos Express installations.

### SAP BW support

Cognos Express customers must ignore the topics about SAP BW custom properties because SAP BW is not supported in Cognos Express.

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## Cognos Mashup Service

The IBM Cognos Mashup Service is supported for IBM Cognos Express customers. Customers who plan to use the Cognos Mashup Service must take into account the following considerations when using the *IBM Cognos Software Development Kit Mashup Service Developer Guide*.



## URLs in Cognos Express

Cognos Mashup Service URLs must be modified to work with Cognos Express. See “Cognos Express URLs” on page 3 for more information.

## Authentication

All Cognos Mashup Service applications must use authentication.

## JSON format

The JavaScript Object Notation (JSON) format is not supported for Cognos Mashup Service applications.

## Cognos Mashup Service samples

When you authenticate using a Cognos Mashup Service sample program, you must enter the namespace value manually. The namespace value is CognosExpress or, for Active Directory authentication, CognosExpressActiveDirectoryID.

You must install the Cognos Express Gateway in order to use the JavaScript samples.

The following Cognos Mashup Service sample programs do not work with Cognos Express installations.

- Java samples
  - ExecReports
  - ExpandTreePrompt
  - PromptAnswers
  - SearchPromptValue
  - SingleReportPart
- C# samples
  - ExecuteReports
  - ExpandTreePrompt
  - PromptAnswers
  - SearchPromptValue
  - SingleReportPartFetch
- JavaScript samples
  - drillDownFromChart
  - drillThrough
  - drillThroughFromChart

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## Cognos User Interface and Error String Customization Toolkit

The IBM Cognos User Interface and Error String Customization Toolkit is supported for IBM Cognos Express customers. Customers who plan to use the Cognos User Interface and Error String Customization Toolkit must take into account the following consideration when using the *IBM Cognos User Interface and Error String Customization Toolkit Installation and User Guide*.

Only a subset of the files listed in the topic on files to customize in Cognos Business Intelligence are available in Cognos Express.



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