

Proven Practice

Upgrading to IBM Cognos Controller 10.4.2 from Controller 10.4.1 - BASIC STEPS

Product(s): IBM Cognos Controller

Area of Interest: Infrastructure

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1 Introduction

1.1 Purpose

This document is designed to be a simple/basic guide (complete with screenshots) for how to upgrade "standard/basic" Controller **10.4.1** system to Controller 10.4.2 (released 19th Dec 2019).

- If upgrading from an earlier version of Controller (for example **10.2.x, 10.3.x or 10.4.0**), then there may be other (extra) changes that they will have to perform.
- However, customers may feel it is easier to build a **brand-new 10.4.2 server** (rather than upgrading an older server). If so, then please refer to separate documentation here: <http://www-01.ibm.com/support/docview.wss?uid=swg21608353>

This document is intended to be utilised by customer's I.T. departments, consultants and partners to help perform upgrades of Controller in '**simple / standard**' environments. For example, it is **ideal** for use in upgrading:

- a development ('test') server
- a pre-sales local laptop installation
- a test VMWare environment.

It is also **suitable** to be used for upgrading **production** systems, **so long as**:

- The system is a simple/standard implementation of Controller
- **The customer accepts responsibility** for any problems that may arise from the use of this document
 - In other words, the customer accepts that **IBM's recommendation is always to employ an experienced IBM Cognos Technical Consultant** to help them upgrade to later versions of Controller.
 - Employing an experienced IBM technical consultant will ensure that the risk is minimised of unexpected issues arising from an upgrade.

By following these "best practices" the intention is to make Controller upgrades as easy as possible, with the minimum of possibility for errors/issues.

The author suggests that experienced technical consultants can **also** use this document as an 'aide-memoir', i.e. a concise set of instructions for upgrading the software as per current best practices, for typical situations.

This document was last updated by the author [April 15th 2020](#).

1.2 General Assumptions

This document assumes:

- There is only one (single) Controller application server
- Controller has been installed in a standard/simple/"default" way, with no special customization
- The server also contains Cognos Analytics 11.0.13 (which is the version bundled with Controller 10.4.1)
- Cognos Analytics (CA) has been installed in the default location.
- You have already got a suitable backup of the server (for example a full "Ghost" image or VMWare/ESX image), and you are happy that you have a fallback plan in place should anything unexpected happen during the upgrade
 - This is purely as a precaution, in case of unexpected problems.

In other words, this document is designed to be a simple/basic guide for how to upgrade "standard/basic" Controller 10.4.1 system to Controller 10.4.2.

1.3 Exclusions and Exceptions

This document is **not** intended to entirely replace the official 'standard' documentation, which can be found here: https://www.ibm.com/support/knowledgecenter/en/SS9S6B_10.4.2/com.ibm.swg.ba.cognos.qrc_ctrl_inst.doc/c_qsg_ctrl_settinguptheenvironment.html Instead you can use this guide as a concise summary companion to the official documentation. In any event of overlap, the standard documentation takes precedence.

1.4 Warning – Please read before continuing

There are an infinite variety of possible customer I.T. environments/needs/specialist requirements. Therefore, IBM has intentionally made Controller flexible to give the customer many different ways to upgrade to Controller 10.4.2. Therefore, the advice in this document may have to be modified by the reader to fit in with their specific needs/environment.

- Although this document demonstrates proven practices suitable for most environments, it is not necessarily perfect for all environments. Employing an experienced IBM Cognos technical consultant to upgrade your Controller server(s) is always the recommended & ideal scenario.

Controller is an important product/system to its users. Therefore, care should be taken over upgrading a Controller system. Therefore:

- In an ideal world, upgrading should **only** be done by experienced IBM Cognos technical consultants
- However, less experienced people may wish to use this document (for example for upgrading 'test' systems - or "demo" VMWare images).

However, this document may *also* be used by the I.T. administrators of IBM Cognos Controller customers to upgrade their 'live' systems, but *only at their own risk*.

IMPORTANT: IBM Cognos 100% recommends that all upgrades are done on-site by an experienced IBM Cognos technical consultant, who can ensure that the upgrade goes smoothly. However, if you feel confident that you have taken appropriate safeguards (e.g. have plenty of downtime, and have made adequate server and database backups) then (*against IBM Cognos' ideal best practices*) customers can use this document to help themselves perform the upgrade on their own.

1.5 Considerations about upgrading the Cognos CA (previously known as "BI") reporting environment

Upgrading Cognos Analytics (CA) servers is (generally) easier than in the past (when using the old 'Cognos BI' software).

- However, this document assumes that you are NOT going to upgrade CA
- This is because the version of CA bundled with 10.4.2 (CA 11.0.13) is the same as the one bundled with Controller 10.4.2.

1.6 IBM Technote knowledgebase

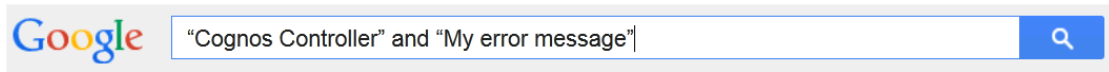
Many of the author's tips and recommendations refer to IBM's excellent knowledgebase, which contain the IBM "Technotes".

- It is absolutely VITAL that the reader uses this **knowledgebase** resource, since it is an invaluable help for almost all issues.

There are many ways to search those Technotes.

- One method it to use the IBM 'My Support' here: https://www.ibm.com/mysupport/s/?language=en_US
- Alternatively (typically easiest for most people) simply use 'Google'.

For example, if you want to search for the error message "My error message" then run the following **Google search**, and the top results should be our Technotes:



In addition, most of the author's other **Proven Practice** documents can be found inside these Technotes.

- For example, see here for the latest version of this document:
<https://www.ibm.com/support/pages/node/213339>

2 Important Notes, Tips and WARNINGS

2.1 Do not ignore/skip any sections of this document, unless you understand the consequences!

It is possible to install Controller and get it working without performing some of the steps that the author prescribes/recommends (in this document). However, customer feedback has confirmed that, unless you perform all of my recommendations/extra-steps, then the customer's Controller system will NOT work well in the long-term.

Therefore, throughout this document, there will be **hints & tips** in **blue** boxes such as this one:

TIP: Ignoring the tips may cause the Controller system to be slow, unreliable or have long-term issues.

In addition, there will be **VITAL** information inside **red** boxes:

WARNING: If the information in these boxes is ignored, the Controller system is likely not to work at all correctly.

2.2 Server name conventions – FQDN and NetBIOS

Throughout this document, we shall talk about configurations that refer to the **<servername>** of your Controller server. There are two main conventions for server naming:

1. **NetBIOS** – for example 'MYSERVERNAME'
2. **FQDN** – for example 'MYSERVERNAME.uk.companyname.com'

Alternatively, you may even be using something else to refer to your servers. For example, you may want to use a "virtual" DNS name (for Disaster Recovery purposes).

Whatever naming convention that you choose, you ***must*** use the SAME (correct) version of your server name at ***all*** times, to retain consistency.

WARNING: To summarise, customers should typically use NetBIOS or FQDN names **throughout their entire configuration/deployment**, but not both (a mixture).

Using a mixture of naming conventions will cause complications/problems later.



Before continuing, are you sure you want to upgrade your *existing*** Controller application server to 10.4.2?**

This document is based on upgrading an **existing** Windows server (which already hosts Controller server software) to a later version (10.4.2). However, is this the best idea for your company/situation?

Nowadays most customers use virtual servers. It is extremely easy to make new virtual servers, clone/archive old servers etc. For this reason, many customers decide that it is best to create a **brand new** Controller 10.4.2 server (instead of upgrading the existing server).

- This will allow the customer to run the old/new systems side by side (e.g. during UAT testing)

AUTHOR'S GENERAL RECOMMENDATION: If you intend to move from using the old built-in Cognos BI to the new (bundled) Cognos Analytics (CA) server, then it is normally easier to build a brand-new server (rather than upgrade the existing one).

If you think you would benefit from using this approach (creating a brand new 10.4.2 server) then do not carry on further with this document. Instead, read the author's separate document "Installing & Configuring IBM Cognos Controller 10.4.2 server - Support Proven Practice" (available here: <https://www.ibm.com/support/pages/node/213339>).

3 Initial Prerequisites

3.1 Inform users of Downtime

Ensure that all users are aware that the Controller system will be unavailable. Assuming the upgrade is performed by an efficient and **experienced** person, then:

- The Controller server upgrade process should take approximately **3-4 hours**
- The Controller client upgrade process should take approximately **5 minutes** (for each client)

Naturally, if you are inexperienced, then the process will take longer.

In addition, if you are using the optional Controller '**FAP**' functionality, then you will probably want to upgrade your TM1 / FAP software/services (in addition to the Controller 'main' software).

- This will add a **significant extra** amount of downtime/work.

3.2 Backup all databases as a precaution

Identify all your Controller-related databases:

- All customers will have at least one "**application**" database (for example "ControllerLIVE", "ControllerTEST" etc.)
- All customers will have one "**ContentStore**" database
- Many customers will have "**Data Mart**" database(s), and/or "**FAP**" databases

Check that **all** your databases have been successfully backed-up recently (for example, the night before).

IMPORTANT: Make sure you are 100% sure that (a) you are sure which databases you need to back up and (b) you are 100% confident that the backups have completed successfully.

This upgrade will alter the database "schemas" and thus **render the database unreadable to any earlier version of Controller**. Therefore, in the unlikely event of an issue with the upgrade, you would need to revert the database back to the version before the upgrade.

3.3 **IMPORTANT:** Be aware of the deprecated supported software environments, and other changes.

Since you are upgrading from an older version of Controller, the new version may not support the third-party component or operating system that you are currently using.

- Full details of the supported software environments for Controller 10.4.2 is here:
https://www.ibm.com/support/knowledgecenter/en/SS9S6B_10.4.2/com.ibm.swg.ba.cognos.qrc_ctrl_inst.doc/c_qsg_ctrl_supportedenvironments.html

Therefore, in order to be 100% officially supported, **check to see if you need to upgrade third-party components** (for example upgrade your Excel version or Windows version).

3.4 Download the Controller 10.4.2 GA (a.k.a. original RTM release) software from the IBM website

Instructions for how to download 10.4.2 are found here: <https://www.ibm.com/support/pages/downloading-ibm-cognos-controller-1042>

TIP: Typically, most customers will only need to download the following components:

- (1) 'Main' Controller server software
 - **CC3SMML** = Controller 10.4.2 Microsoft Windows Multilingual
 - This is the file IBM_COGNOS_CONTROLLER_10.4.2_MICR.tar.gz
- (2) Cognos Analytics server
 - **CNV2WML** = Cognos Analytics Server **Limited Use** 11.0.13 Microsoft Windows Multilingual
 - This is the file ca_server_var_win64_11.0.13.exe
- (3) Planning Analytics (TM1) Server
 - **CC2RSML** = Planning Analytics 2.0.8 Microsoft Windows Multilingual
 - This is the file PA_2.0.8_MICROSOFT_WINDOWS_ML.tar.gz

3.5 Download any preferred/recommended (post 10.4.2 RTM) Interim Fix Packs

The author recommends downloading the latest patch in order to benefit from the latest bug-fixes.

- See here for the latest patch versions: <https://www.ibm.com/support/pages/node/1167628>
 - At the time of writing, the latest interim fix (IF) version is IF3.
- If necessary, contact IBM Support for permission to download the latest restricted patch version.

3.6 Create a complete server virtual image backup

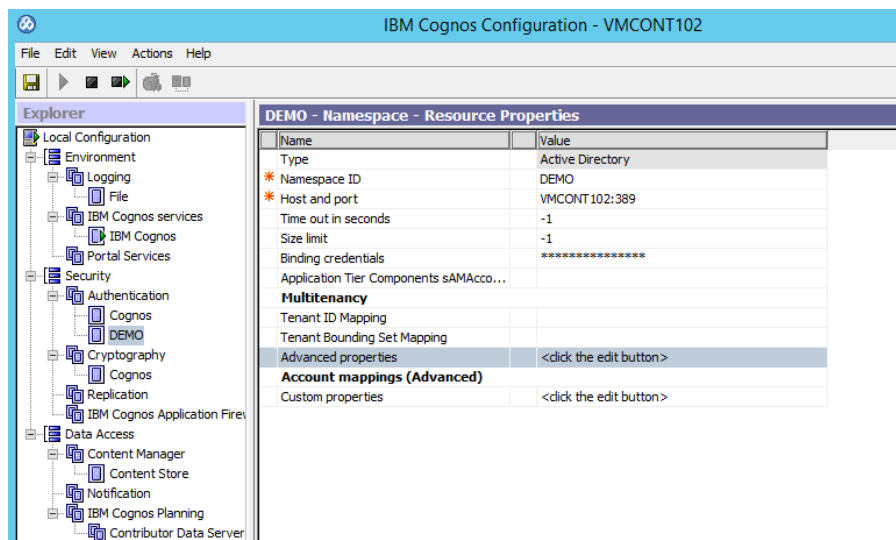
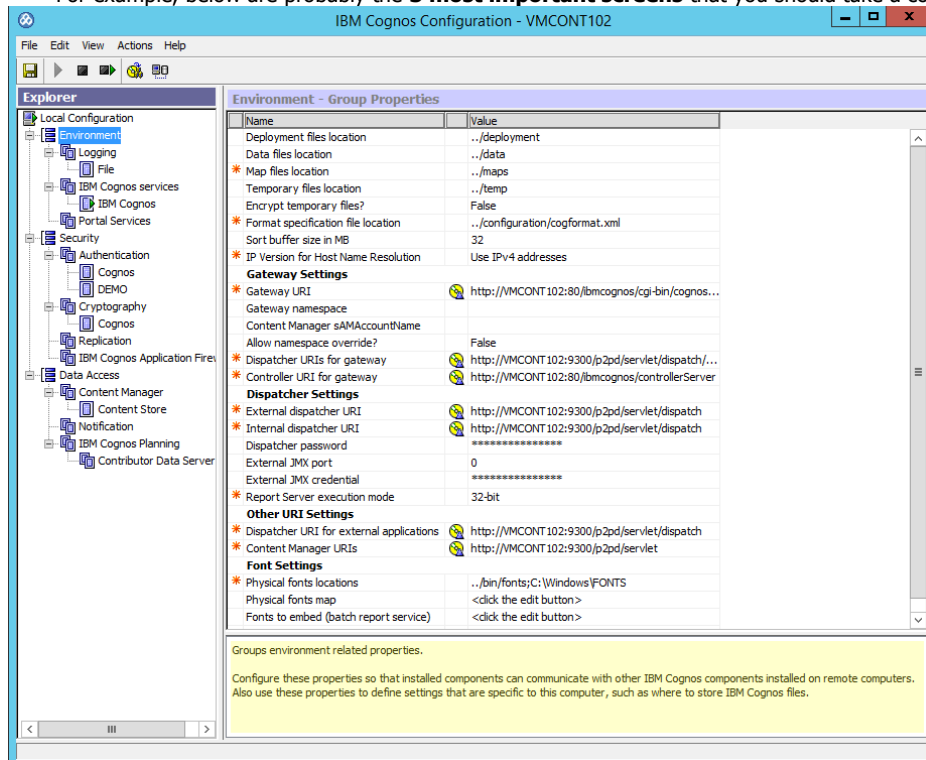
In case of unexpected problems, ensure that your Controller application server has been backed up 100% thoroughly. Typically, this is done by creating a virtual server image copy of the current system (before making any changes).

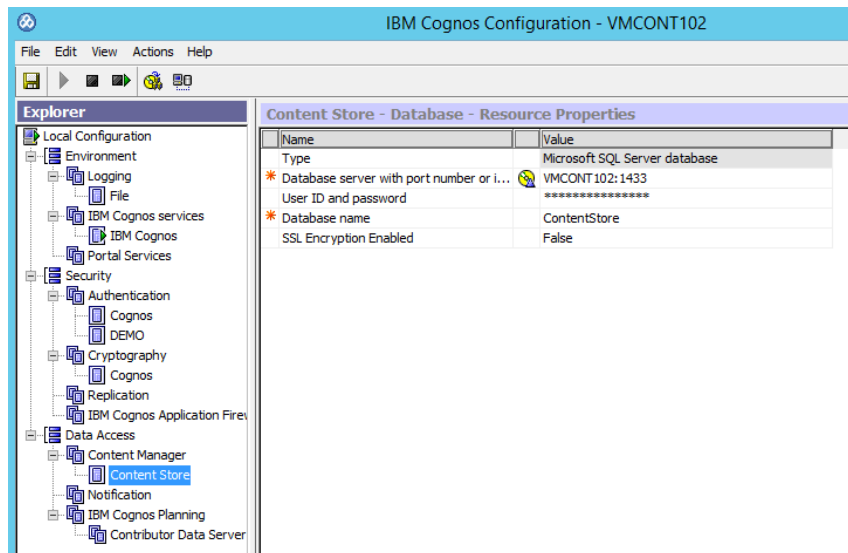
3.7 Keep a backup record of all current configuration settings BEFORE proceeding

Vital: In later steps, there is requirement to apply some settings to the 'Cognos Configuration' and 'Controller Configuration' programs. It is **vital** that these programs are launched **before** the upgrade, and you make a note of **all** the settings (which we shall refer to later in the document).

Therefore, before proceeding, launch "Cognos Configuration" from the Start Menu. Take print-screens of **all** the current settings inside **all** sections (and paste them into a Word document) for reference purposes.

- For example, below are probably the **3 most important screens** that you should take a copy of:





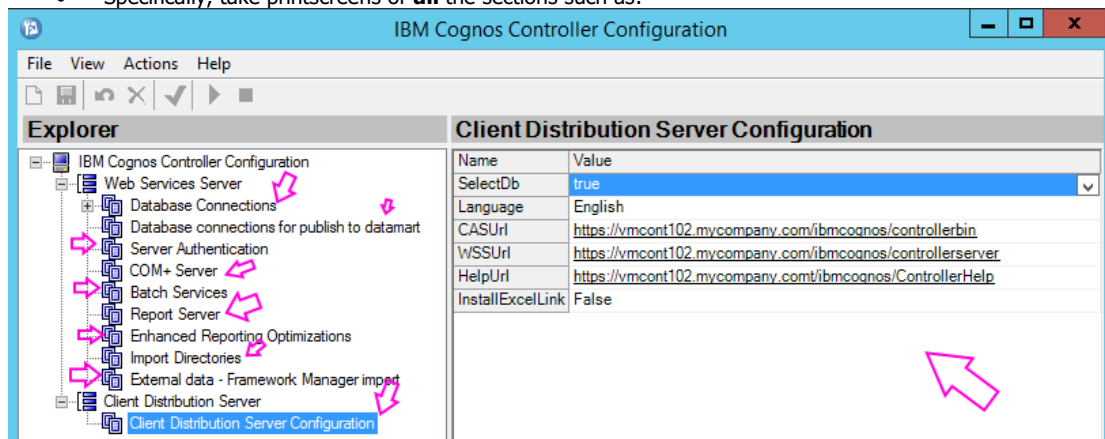
Repeat the above **for all screens**, taking print-screens of **everything**, until *all* information inside **every section** is captured

TIP: In addition to the above, it is **vital** that you export the current configuration to a file:

- o Click "File - Export As"
- o When prompted, choose "yes" to export decrypted content
- o Choose a new folder (for example, onto the 'desktop')
- o Save the file as 'Export_<date>_cogstartup.xml'
- o Keep this file safe (for example store in a sensible backup folder).

Similarly, repeat the above for "Cognos Controller Configuration".

- Specifically, take printscreens of **all** the sections such as:



Repeat the above (take print-screens of everything) until *all* information inside *each and every* section is captured

By performing the above, this will allow you to refer back to your settings later, when you are asked to enter the appropriate values.

If ALL of the above conditions have been met, then please proceed...

3.8 Rarely necessary Create backup of JDBC settings file 'ccr-dbTypes.properties' file

NOTE: For most customer's environments, the Java database connection file ("ccr-dbTypes.properties") can be left as the default values (unmodified). **Therefore, for most installations, you can skip this section.**

As a precaution:

- Open this folder: C:\Program Files\ibm\cognos\ccr_64\server\integration
- Copy the file 'ccr-dbTypes.properties' to: "Backup_before_10.4.2_upgrade_ccr-dbTypes.properties"



3.9 For Oracle Only - Create backup of JDBC settings file 'ccr-system-properties.properties' file

NOTE: This is only for customers using Oracle.

This file may be overwritten during the upgrade. Therefore, to prevent losing the settings from your FAP system, please backup this file by:

- Open this folder: C:\Program Files\ibm\cognos\ccr_64\server\integration
- Copy the file 'ccr-system-properties.properties' to: "Backup_before_10.4.2_upgrade_ccr-system-properties.properties"

3.10 Controller Web only - Create backup of Controller Web settings files

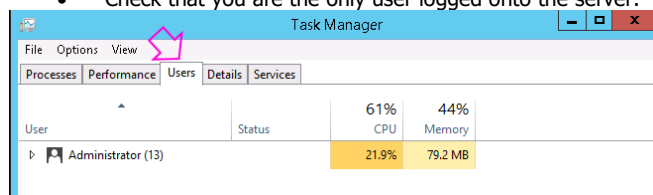
NOTE: This is only for customers who are currently using the 'Controller Web' feature.

Controller Web configuration files are overwritten during the upgrade. Therefore, to prevent losing the settings from your Web system, please backup the relevant files:

- C:\Program Files\IBM\cognos\ccr_64\fcweb\wlp\etc\server.env
- C:\Program Files\IBM\cognos\ccr_64\fcweb\wlp\usr\servers\fcweb\com.ibm.cognos.fcweb.properties
- C:\Program Files\IBM\cognos\ccr_64\fcweb\wlp\etc\jvm.options
- C:\Program Files\IBM\cognos\ccr_64\frontend\config.js

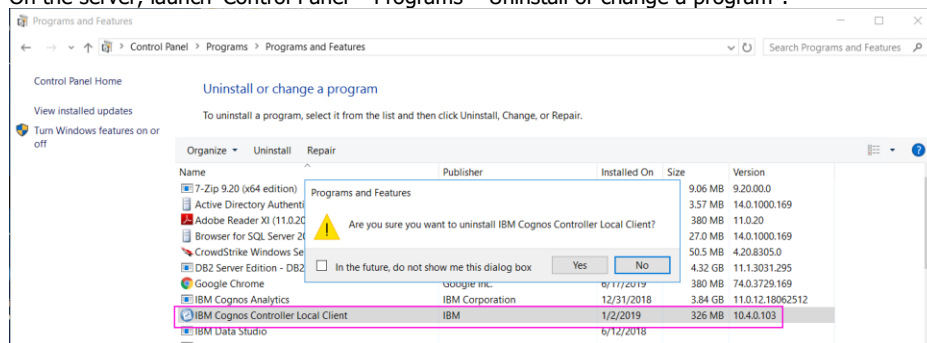
3.11 Uninstall existing version of Controller client (if installed) from the application server

1. Logon to the application server
2. Check no users are running a remote session on the server
 - Launch "Task Manager"
 - Click on tab 'Users'
 - Check that you are the only user logged onto the server:



3. Uninstall the old version of the Controller client from the server:

On the server, launch 'Control Panel – Programs – Uninstall or change a program':



- Highlight the relevant client (e.g. "IBM Cognos Controller Local Client" - This will be named differently, depending on the version of Controller you have installed)
- Click "**Uninstall**"
- Confirm that you want to uninstall the software

3.12 Uninstall existing version of Controller client on the client devices

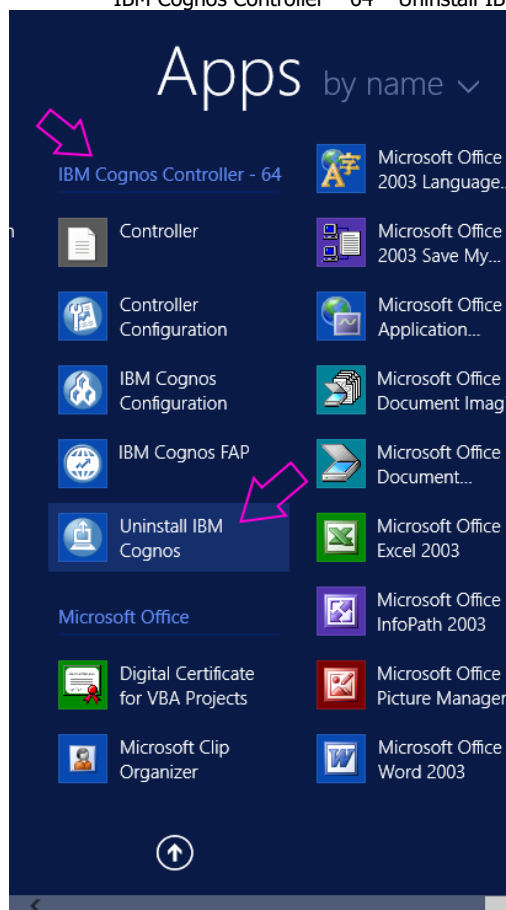
Most customers deploy Controller client via Citrix (or Microsoft Remote Desktop / Terminal Servers). Some deploy the client directly on and user's PCs/laptops. Some customers use a mixture of both.

- You need to perform the above step (to uninstall the client) on all client devices.

3.13 Uninstall existing version of Controller server

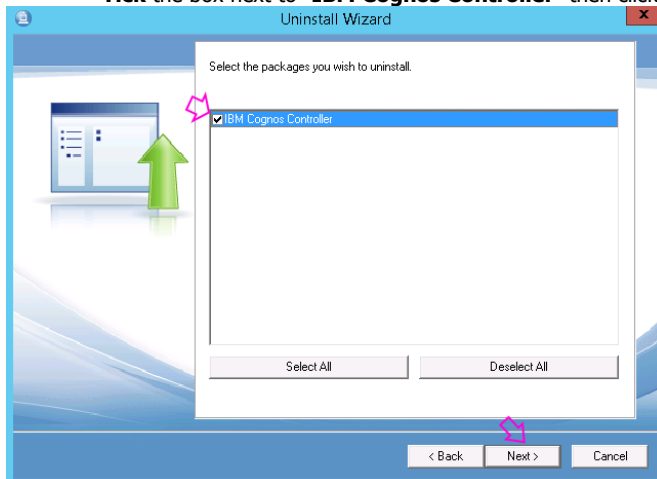
On the Application Server, uninstall the old Controller server version. The menu item is different depending on Controller version:

- **For modern versions of Controller (for example 10.4.1):** In the start menu (or APPs listing) click "IBM Cognos Controller – 64 – Uninstall IBM Cognos"

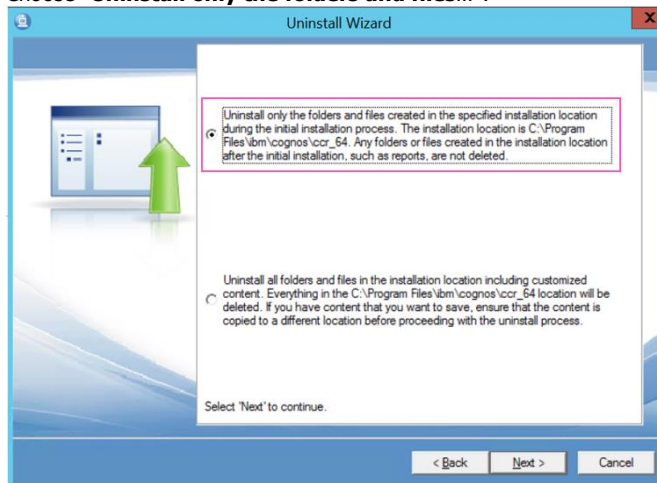


The uninstall wizard will vary slightly (depending on what version of Controller you are uninstalling), but in general:

- **Tick the box next to "IBM Cognos Controller"** then click **"Next"**:



Choose **"Uninstall only the folders and files..."**:



After a few minutes, it will have uninstalled all components (for example 10.4.1 contains 52). Finally, click "Finish"

TIP:

At this stage (before going any further), please take a backup of the current "residual" files (those left behind after the uninstall).

For example, create a compressed (ZIP) file containing the folder "C:\Program Files\ibm\cognos\ccr_64". For example create a ZIP file "C:\Program Files\ibm\cognos\ccr_64.backup_before_10.4.2_upgrade.zip" containing the contents of that folder.

This is to make an 'archive' of the old configuration files. By doing the above, it would make reverting to the previous Controller version (in the event of issues) much easier.

3.14 VITAL – Install .NET Framework 4.7.2

IMPORTANT: This step is new for Controller 10.4.2. If you fail to perform this step, then the service 'IBM Cognos Controller Web Spreadsheet Service' will not install! For more details, see here: <https://www.ibm.com/support/pages/node/1168390>

- Download .NET Framework 4.7.2
 - This is the file "**NDP472-KB4054530-x86-x64-AllOS-ENU.exe**"
 - At the time of writing, it can be downloaded from here: <https://support.microsoft.com/en-gb/help/4054530/microsoft-net-framework-4-7-2-offline-installer-for-windows>
- Double-click on: **NDP472-KB4054530-x86-x64-AllOS-ENU.exe**
- Perform a default installation
- **Reboot server**

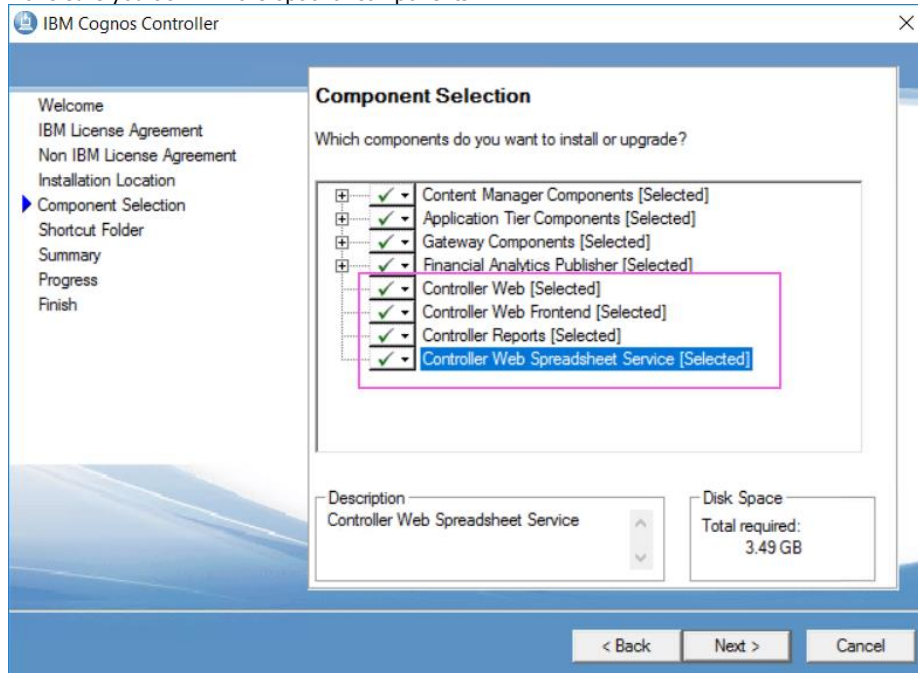
3.15 Installation of Controller 10.4.2 Server

Logon to the Controller Application Server and extract the installation media (IBM_COGNOS_CONTROLLER_10.4.2_MICR.tar.gz) to a sensible folder location. Afterwards, launch the install routine from the folder.

- Double-click on: ...winx64h\issetup.exe

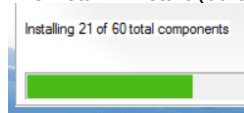
During the install, you are asked several questions. Assuming that you only have one single application server, then typically choose the following defaults:

- (English) **Next**
- "I Agree", **Next**
- "I Agree", **Next**
- <default installation location C:\Program Files\IBM\cognos\ccr_64> **Next ("Yes")**
- Make sure you tick **ALL** the optional components:



- Next
- "IBM Cognos Controller - 64" **Next**
- Next

The install will start (60 components):



After it has completed, click **"Finish"**.

3.16 Install/apply required Interim Fix or Fix Pack

TIP: It is VITAL that the IF is installed without any IBM Cognos-related services/processes running.

⇒ Therefore apply the Interim Fix / Fix Pack now (before continuing)

At the time of writing (April 2020), the latest 10.4.2 patch available is interim fix 3 (IF3)

- For the most up-to-date instructions/advice about applying patches (Interim Fixes and Fix Packs), see here: <https://www.ibm.com/support/pages/node/1167628>

3.17 Upgrading 'Cognos Analytics' (CA)

If you have a slightly older version of CA (for example 11.0.12 installed), then you may want to upgrade it to 11.0.13 (which is the version bundled with Controller 10.4.2):

- Double-click on: **ca_11.0.13_win_ml.exe**
- In general, for most customers they should choose the default settings, and follow the instructions

3.18 Only if brand-new CA installation - Copy database JAR file(s)

Copy your database connection JAR file(s) (for example 'sqljdbc4.jar') from the old source folder (for example: C:\Program Files\ibm\cognos\ccr_64) to the relevant new CA folder (for example: C:\Program Files\ibm\cognos\analytics\webapps\p2pd\WEB-INF\lib).

3.19 Only if brand-new CA installation - 'Cognos Configuration' – Make sure settings are correct

Inside the 'IBM Cognos Analytics' Start menu program group, launch 'Cognos Configuration'

- If you have simply upgraded an existing CA (for example upgraded from CA 11.0.12 to 11.0.13) then you should find that all the settings look correct. *Therefore you can skip to the next section.*
- Alternatively, if this is a brand-new CA installation, then you will need to configure the settings as appropriate (see below).

Assuming this is a brand-new default installation of CA, then:

- (a) For most customers, the default settings for most screens are OK (do not change). As an example, typically 'Environment' settings are OK (so do not change), for example typically do not change this:

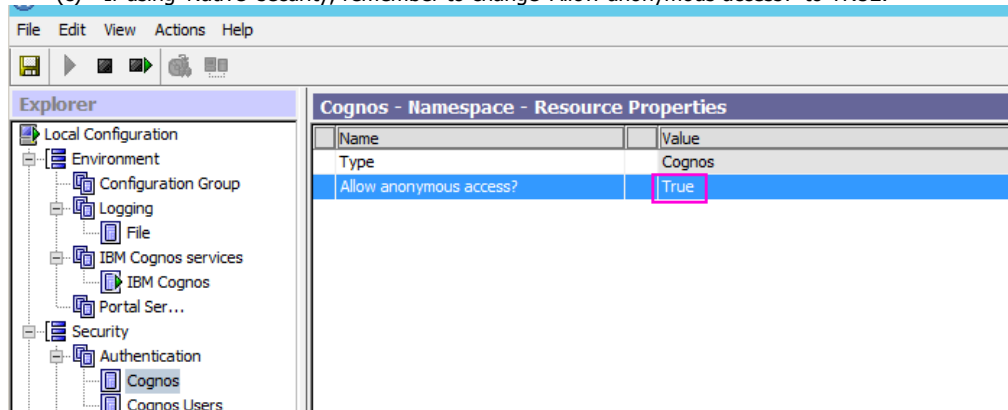
Name	Value
Deployment files location	../deployment
Data files location	../data
* Map files location	../maps
Temporary files location	../temp
Encrypt temporary files?	False
* Format specification file location	../configuration/cogformat.xml
Sort buffer size in MB	32
IP Version for Host Name Resolution	none
Gateway Settings	
* Gateway URI	http://VMCONT102:9300/bi/v1/disp
Dispatcher Settings	
* External dispatcher URI	http://VMCONT102:9300/p2pd/servlet/dispatch
* Internal dispatcher URI	http://VMCONT102:9300/p2pd/servlet/dispatch
Dispatcher password	*****
External JMX port	0
External JMX credential	*****
* Report Server execution mode	32-bit
Other URI Settings	
* Dispatcher URI for external applications	http://VMCONT102:9300/bi/v1/disp
* Content Manager URIs	http://VMCONT102:9300/p2pd/servlet
Font Settings	
* Physical fonts locations	../bin/fonts;C:\Windows\FONTS
Physical fonts map	<click the edit button>
Fonts to embed (batch report service)	<click the edit button>
Fonts to embed (report service)	<click the edit button>

- (b) CA's default memory setting is **4096** (4Gb). For most customers, this is ideal.

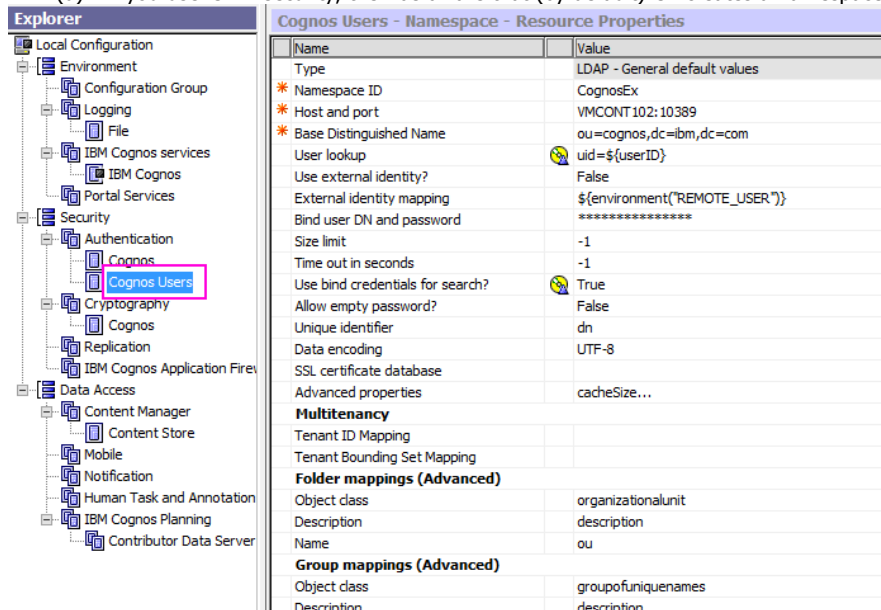
However, **if your application server has less than 12Gb RAM**, consider reducing this to 2048:

Name	Value
Type	WebSphere Liberty Profile
* Ping timeout in seconds	240
* Stop wait time in seconds	60
* Maximum memory for Websphere Liberty Profile in MB	2048
Advanced properties	coreThreads...

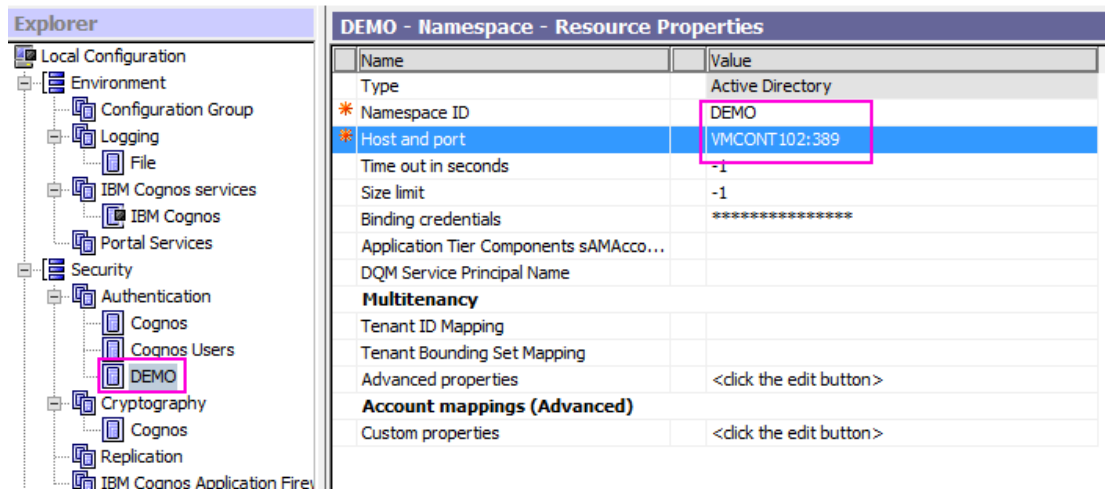
(c) If using 'Native' security, remember to change 'Allow anonymous access?' to TRUE:



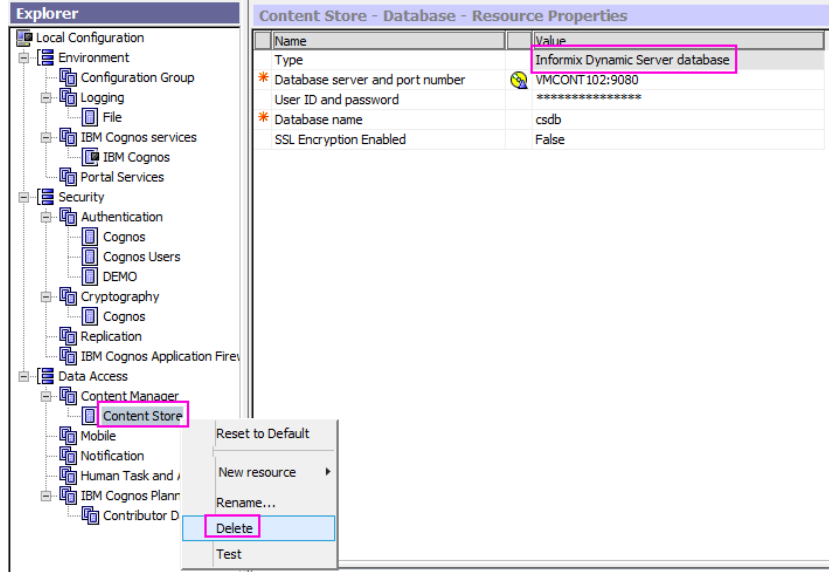
(d) If you use 'CAM' security, then be aware that (by default) CA creates a namespace called "CognosEx":



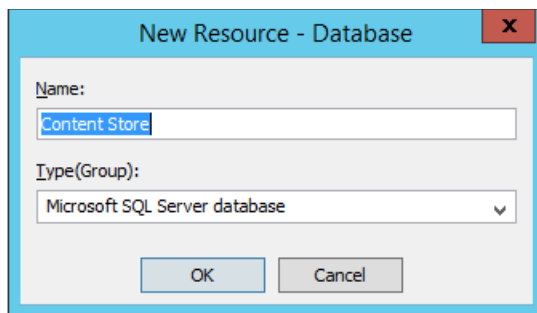
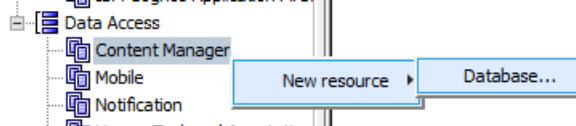
You will therefore need to manually create a new Namespace, with the same settings as your old Cognos BI installation (that you had on your older version of Controller). Therefore you will need to refer back to your Word document (containing the printscreens) that you created earlier, and manually copy them in here, for example:



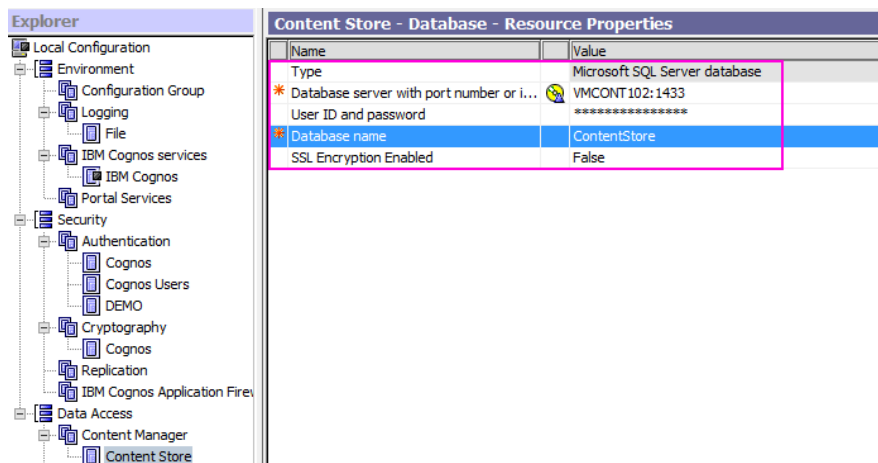
(e) Most customers will want to delete the default Content Store (based on an Informix database):



Afterwards, create a new Content Store...



...using the same settings as your old Cognos BI system (re-using its same ContentStore, which will be upgraded and re-used for CA), for example:



3.20 'Cognos Configuration' – Saving Settings and starting service

Inside the '**IBM Cognos Analytics**' Start menu program group, launch 'Cognos Configuration'

Click the following buttons (top-left corner):

- Save changes
- Start the service

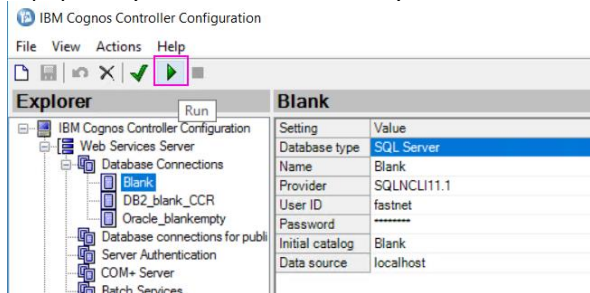


Afterwards, it is a good time to test that the Cognos Connection website (<http://servername:9300/bi>) works OK.

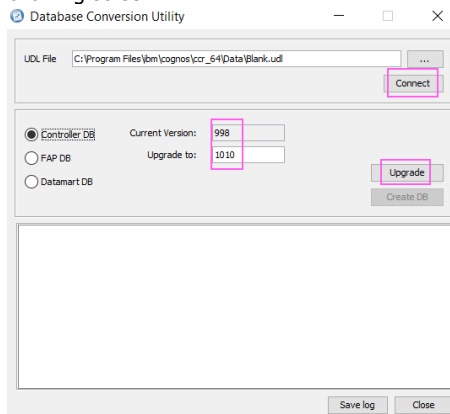
3.21 'Controller Configuration' – Upgrading application database schemas

Launch **Controller Configuration** on the Application Server, by opening "Start –Programs – 'IBM Cognos Controller – 64' - IBM Cognos Controller - **Controller Configuration**"

- Click "database connections" and then highlight your database
- Click on the green "tick" and ensure that it says "connection succeeded"
- Click on the green "play" icon (see below - next to the tick) labeled "Run"

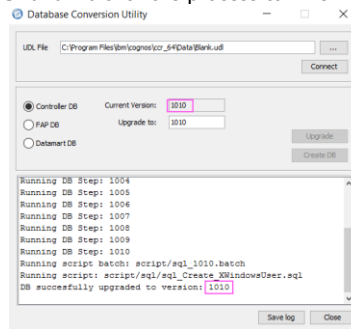


- Click "Connect" at the following screen:

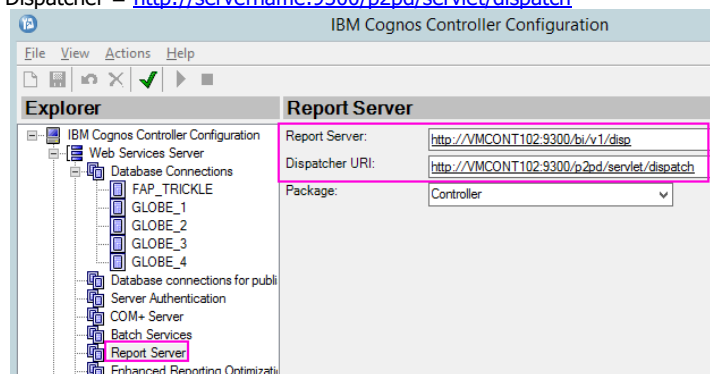


IMPORTANT: MAKE SURE THAT YOUR SCREEN ABOVE IS FILLED IN SIMILARLY TO THE ABOVE (i.e. there is a number inside '**Current Version**' ... it is not just zero or blank) BEFORE PROCEEDING (otherwise you could corrupt your SQL database)

In your case, you will see that the "Current Version" is lower than the new "Upgrade to" DB version ('1010' for 10.4.2). Because of this, click **"Upgrade"** and wait for the process to finish:



- Click "Close".
- Repeat the above process to upgrade all other databases
- Click on "Report Server" and change the settings to be compatible with CA, for example:
 - Report Server = <http://servername:9300/bi/v1/disp>
 - Dispatcher = <http://servername:9300/p2pd/servlet/dispatch>

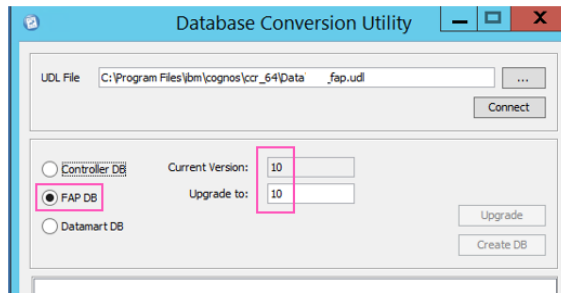


- Click on the other menu items (for example "Server Authentication", "Batch Services" and "Client Distribution Server") and ensure that they are configured correctly (typically the same as your old version)

3.22 Optional – if using FAP - 'Controller Configuration' – Upgrading FAP database schema

This step is only for customers who use FAP.

- Launch "Controller Configuration" and open 'database connections'
- Select/choose the relevant 'FAP' entry
 - TIP: If this does not exist, then you will need to create a new entry, for example:
 - database Type (for example "SQL Server")
 - Name: controller_fap_data_mart
 - Provider: SQLNCLI11.1
 - User id: <SQL login name> (for example "fastnet")
 - Password: <password>
 - Initial Catalog: <FAP trickle database name> (for example "controller_fap_data_mart")
 - Data source: <SQL_server>
 - Click 'Save'
- Select this database connection (for example "controller_fap_data_mart") and click the "run" button (green triangle). *This will launch the "Database Conversion Utility"*
- Check that the "UDL File" is correctly pointing to your FAP database
- Click the "FAP DB" radio button
- Click "Connect"



- If the value for 'Current Version' is LESS than the value for 'Upgrade to' then click "**Upgrade**"

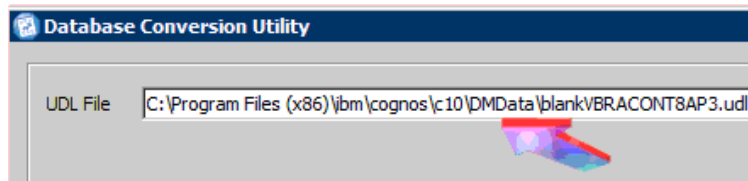
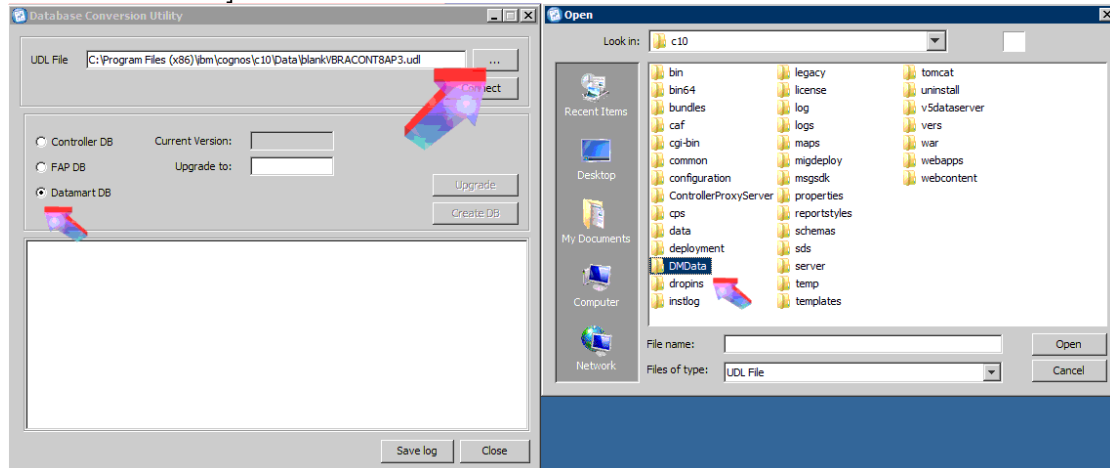
IMPORTANT: After doing the above steps, you should 'tidy up' the FAP Database Connection by moving the UDL file (for example C:\Program Files\ibm\cognos\ccr_64\data\controller_fap_data_mart.UDL) to a new folder (for example C:\Program Files\ibm\cognos\ccr_64\data\FAP_UDL). *If you do not do this, then users will see this in their list of databases to choose from when they launch Controller.*

3.23 Optional – if publishing to BI datamart - 'Controller Configuration' – Upgrading Data Mart database schemas

This step is only for customers who publish Controller data to Data Marts which are (typically) accessed by Cognos Analytics (previously known as 'Cognos BI').

Repeat the instructions in the previous section, but this time:

- Click on the **"Datamart DB"** radio button (see picture above)
- Click on the 'browse' button ("...") and **MAKE SURE THAT YOU OPEN THE "DMData" folder** [NOT the "Data" folder]



- Choose your UDL file and upgrade it.

Repeat the above process to upgrade the Data Mart version for all other database connections inside the "DMData" folder.

3.24 Optional – Controller Web

Controller Web is an optional component, that was first introduced in Controller 10.3.0.

If your server did **not** have Controller Web 10.4.0/10.4.1 installed before, then you need to install/configure it using these instructions: <https://www.ibm.com/support/pages/how-install-controller-web>

If your server **did** have Controller Web 10.4.0/10.4.1 installed before, then your setting will have been overwritten (with default values). Therefore you need to perform all the steps in that Technote (<https://www.ibm.com/support/pages/how-install-controller-web>) except:

- You can skip step 1 (install the Web components) because this has already been done earlier
- If you are unsure of any values to use, then typically you can refer to your old values (used by the previous version of Controller Web that you had installed), which are in the files that you backed up previously (see section 3.11).

Finally, test Controller Web via your browser using the following url: [http://\[servername\]:9080/fcm.web/login](http://[servername]:9080/fcm.web/login)

3.25 Restore the backup of FAP settings file 'FAPService.properties'

If you had FAP installed before the upgrade, then you should have already created a backup of the configuration file 'FAPService.properties' on your server.

You can now restore your backup into the new location (default = C:\Program Files\ibm\cognos\ccr_64\server\FAP\FAPService.properties).

For example, in this folder

- rename the existing file 'FAPService.properties' to 'FAPService.properties.BLANK'
- copy the file "Backup_before_10.4.1_upgrade_FAPService.properties" into the folder
- Rename the file to "FAPService.properties".

3.26 Optional - Restore the backup of JAVA settings file 'ccr-dbTypes.properties'

TIP: For most customer's environments, the Java database connection file ("ccr-dbTypes.properties") can be left as the default value (blank).

Therefore, for most installations, you can skip this section.

For some customer's environments, when upgrading from an old version you need to restore the backup for the configuration file 'ccr-dbTypes.properties' that you made earlier.

TIP: By default, you should copy it to here:

C:\Program Files\ibm\cognos\ccr_64\server\integration\ccr-dbTypes.properties

TIP: For more details, see IBM Technote #1440254.

ORACLE

3.27 Oracle only - Restore the backup of JAVA settings file 'ccr-system-properties.properties'

Restore the backup for the configuration file 'ccr-system-properties.properties' that you made earlier.

TIP: By default, you should copy it to here:

C:\Program Files\ibm\cognos\ccr_64\server\integration\ccr-system-properties.properties

IMPORTANT: Before continuing, you will have to reboot the application server now for all the above system variable changes to be registered.

4 Optional – if using FAP - Upgrading PA/TM1 version

TIP: This entire section can be skipped if you do not use the Controller feature “Financial Analytics Publisher” (FAP) or you have decided to keep the current/existing/old version of TM1.

4.1 Overview

Each main Controller version is bundled with a copy of Planning Analytics (formerly known as “TM1”) for use with the Controller ‘FAP’ functionality.

- However, there is a restriction placed on the *license* for TM1, so it is only allowed to be used for the Controller FAP functionality (not, for example, for use as a standalone TM1 system for analyzing non-Controller data).

For example:

- Controller **8.5 RTM** ⇔ bundled with TM1 **v9.4.1**
- Controller **8.5.1** ⇔ bundled with TM1 **v9.5.0**
- Controller **10.1.0** ⇔ bundled with TM1 **v9.5.2**
- Controller **10.1.1** ⇔ bundled with TM1 **v10.1.0**
- Controller **10.2.0** ⇔ bundled with TM1 **v10.2.2**
- Controller **10.2.1** ⇔ bundled with TM1 **v10.2.2**
- Controller **10.3.0** ⇔ bundled with TM1 **v10.2.2**
- Controller **10.3.1** ⇔ bundled with Planning Analytics (PA) 2.0.2
- Controller **10.4.0** ⇔ bundled with Planning Analytics (PA) 2.0.6
- Controller **10.4.1** ⇔ bundled with Planning Analytics (PA) 2.0.6
- Controller **10.4.2** ⇔ bundled with Planning Analytics (PA) 2.0.8

Therefore, when upgrading the Controller version, many customers (who use the FAP functionality) will also want to upgrade their TM1 server.

4.2 Upgrade TM1 server version to new release

Rather than ‘re-invent the wheel’ this document shall intentionally **not** give precise details of how to upgrade a TM1 server from an old version (for example v2.0.6) to a later version (for example PA 2.0.8).

Instead, the author shall refer you to other existing documentation, for example:

- IBM:
https://www.ibm.com/support/knowledgecenter/SSD29G_2.0.0/com.ibm.swg.ba.cognos.tm1_inst.2.0.0.doc/t_tm1_inst_upgrade_200.html
- Third-party (non-IBM, use at your own risk): <https://exploringtm1.com/how-to-upgrade-planning-analytics-tm1/>

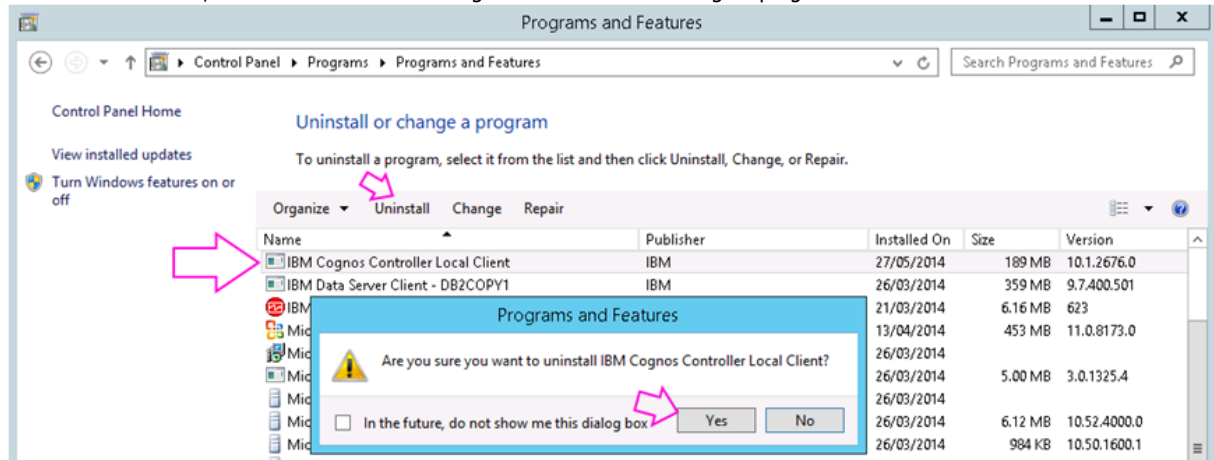
The good news is that when you upgrade Planning Analytics from an old version (minimum 2.0.0) to a later version (2.0.x), you do not need to uninstall the previous version.

- You can install IBM Planning Analytics Local version 2.0.x directly over version 2.0.0 😊

5 Upgrading end user's Controller client version

5.1 Uninstall current version of the client

On the end user's PC, launch 'Control Panel – Programs – Uninstall or change a program':



- Highlight the relevant client (e.g. "IBM Cognos Controller Local Client" - This will be named differently, depending on the version of Controller you have installed)
- Click "Uninstall"
- Confirm that you want to uninstall the software

5.2 Install Controller 10.4.2 client

There are two different versions of the Controller local client – 64-bit and 32-bit.

- Assuming the client device's Windows (operating system) version is 64-bit, then install the 64-bit version.

On the end user's PC:

- Install **CCRLocalClient64.MSI** (located inside folder ...\\webcontent\\ccr)

TIP: This can be downloaded from the application server: <http://servername/ibmcognos/controllerbin/CCRLocalClient64.MSI>

- When asked for **WSSUrl** & **HelpUrl**, typically enter values similar to:

WSS Url: `http://<servername>/ibmcognos/controllerserver`

Help Url: `http://www.ibm.com/support/knowledgecenter`

- Choose the installation folder (default = C:\Program Files\IBM\IBM Cognos Controller Local Client\)

TIP: For full instructions, see here: <http://www-01.ibm.com/support/docview.wss?uid=swg21965917>

5.3 Upgrading the Controller client on a Citrix/Terminal Server

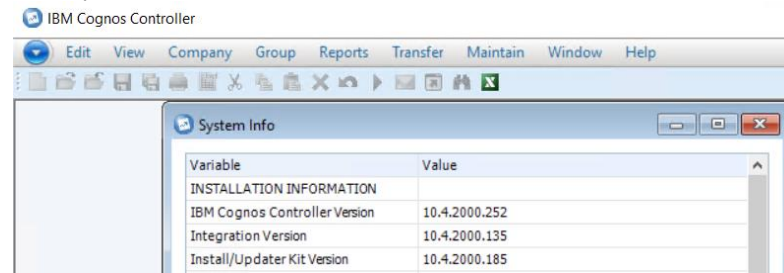
- Logon as an Administrator
- Ensure no other users/sessions running on the Citrix server
- Open 'Add/Remove programs'
- Highlight the old client software
- Click 'Remove'
- Launch a command prompt
- Type: **change user /install**
- double-click on MSI file (for example **CCRLocalClient64.MSI**) and install it
- Type: **change user /execute**

TIP: For more information on installing Controller client on Citrix, see here: <https://www.ibm.com/support/pages/node/6189687>

5.4 Logon & test for each upgraded client PC

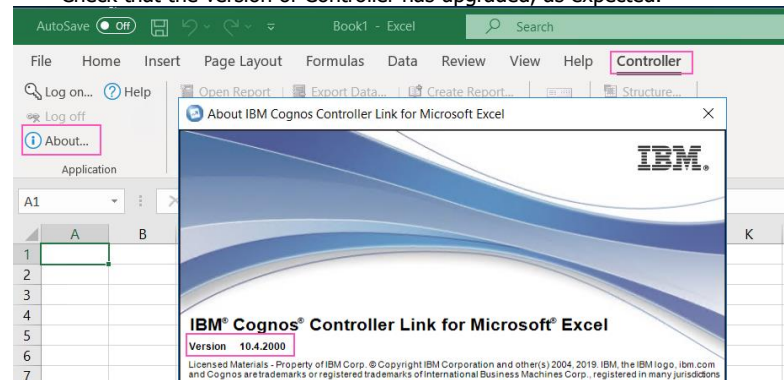
Launch the main Controller client (from the icon in the Start Menu) and login.

- Click 'Help – System Info' and check that the version of Controller has upgraded (shown at the top) to the expected version.



Afterwards, launch Excel, and click 'Controller – About Controller Excel link'.

- Check that the version of Controller has upgraded, as expected.



Typically, the above is all the testing that needs to be performed on the client PC.

- In other words, if the above functions work then it is likely that everything works.

6 Other tasks

6.1 Superuser should optimise database a.s.a.p.

Although the program may not prompt you to do so, it would be ideal to run an "Optimize" (inside the application) for each database, **as soon as you can** after the upgrade.