



Proven Practice

How to install the IBM Cognos Controller 8.4 client on a user's PC

Product(s): Controller 8.4

Area of Interest: Infrastructure

Copyright

Your use of this document is subject to the Terms of Use governing the Cognos software products and related services which you have licensed or purchased from Cognos. The information contained in this document is proprietary information of Cognos Incorporated and/or its licensors and is protected under copyright and other applicable laws. You may use the information and methodologies described in this document 'as is' or you may modify them, however Cognos will not be responsible for any deficiencies or errors that result from modifications which you make. Copyright 2007 (c) Cognos Incorporated. All Rights Reserved.

You can print selected pages, a section, or the whole book. Cognos grants you a non-exclusive, non-transferable license to use, copy, and reproduce the copyright materials, in printed or electronic format, solely for the purpose of providing internal training on, operating, and maintaining the Cognos software.

This document is maintained by the Best Practices, Product and Technology team. You can send comments, suggestions, and additions to BestPractices-ProductandTechnology@cognos.com.

Contents

1	INTRODUCTION	4
1.1	PURPOSE	4
1.2	DISCLAIMER	4
2	OVERVIEW OF CLIENT INSTALLATION.....	5
2.1	SUMMARY OF CONTROLLER CLIENT INSTALL	5
3	PREREQUISITES – CLIENT AND SERVER.....	6
3.1	CLIENT PC SOFTWARE PRE-REQUISITES.....	6
3.2	APPLICATION SERVER - DISABLE AUTOMATIC EXCEL LINK CLIENT INSTALL	6
3.3	SERVER NAMING CONVENTIONS	7
4	CREATING A SOFTWARE 'REPOSITORY' SHARE	8
4.1	CREATING A SHARE "CLIENT_SHARE" ON YOUR APPLICATION SERVER	8
4.2	POPULATE SHARE WITH THE REQUIRED CONTROLLER CLIENT SOFTWARE.....	8
5	INSTALL CLIENT SOFTWARE ON USER'S PC.....	14
5.1	OVERVIEW, PLUS EXTRA REQUIREMENT FOR MICROSOFT VISTA.....	14
5.2	UPDATE THIRD-PARTY SOFTWARE	14
5.3	INTERNET EXPLORER – BYPASS YOUR PROXY SERVER	15
5.4	INTERNET EXPLORER – TRUST CONTROLLER APPLICATION SERVER, TO DOWNLOAD CODE AUTOMATICALLY	16
5.5	CONFIGURE "TRUSTED ZONE" SECURITY ZONE TO BE "MEDIUM" (OR LOWER) FOR IE6, AND "MEDIUM-LOW" (OR LOWER) FOR IE7.....	16
5.6	.NET FRAMEWORK 2.0 SP1 CLIENT, .NET TRUST AND DISABLING .NET CERTIFICATE CHECKING VIA INTERNET	17
5.7	ENSURE MICROSOFT EXCEL USES .NET 2.0 FOR ALL OF ITS ADD-INS.....	17
5.8	INSTALLING CONTROLLER EXCEL ADD-IN	17
5.9	GIVE END-USER THE URL SHORTCUT	17
5.10	OVERALL SUMMARY OF CLIENT INSTALL PROCESS	18
6	TESTING.....	19
6.1	MAIN CONTROLLER PROGRAM	19
6.2	EXCEL LINK	19
7	INSTALLING ON A CITRIX (OR TERMINAL SERVICES) SERVER.....	20
7.1	SCENARIO.....	20
7.2	OVERVIEW:	20
7.3	PREPARING THE CITRIX SERVER:.....	21
7.4	CONTROLLER CLIENT INSTALLATION	22
7.5	ADDITIONAL TIPS FOR CITRIX / TERMINAL SERVER DEPLOYMENTS:	24
8	APPENDICES	26
8.1	APPENDIX 1 – ALTERNATIVE CONTROLLER CLIENT TYPES	26
8.2	APPENDIX 2 – MANUAL METHOD OF CONFIGURING MS INTERNET EXPLORER TRUSTED SITES	26
8.3	APPENDIX 3 – MANUAL METHOD OF CONFIGURING MS INTERNET EXPLORER PUBLISHER'S CERTIFICATE REVOCATION	27

1 Introduction

1.1 Purpose

This document is intended to demonstrate how best to install the Controller 8.4 client on an end-user's PC, inside a typical environment.

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

Later, this document gives best practices for Citrix server client installation.

Earlier versions of Controller:

This document is based on Controller **8.4** (released 27th November 2008).

However, the method demonstrated should be correct for any past/future release of Controller which also uses .NET 2.0 (SP1), for example Controller **8.2** and **8.3**.

*NOTE: Controller **8.1.x** releases use .NET 1.1SP1 technology, so you cannot use this document as a guide for this older (8.1.x) generation of Controller.*

1.2 Disclaimer

- I) Although this document demonstrates proven practices suitable for *most* environments, it is not necessarily perfect for *all* environments.
- II) There are an infinite variety of possible customer I.T. environments, many different ways to install/configure Controller 8.4, and therefore the advice in this document may have to be modified by the customer to fit in with their needs/environment. Your Cognos technical consultant (*who installed your Controller server(s)*) will often be the best person to advise on any extra necessary changes.

2 Overview of Client Installation

2.1 Summary of Controller client install

Assuming that certain prerequisites have been met (see later) then to install the Controller client takes only a few minutes. However, it is important to take the time and effort to ensure that the pre-requisites are 100% met, in order that your deployment is successful.

There are many different ways to install the Controller client (on user's PCs), and this Proven Practice document shall aim to give the most efficient and successful installation method. To summarise this method, in general the I.T. administrator would perform the following steps:

- Add the end user to the local group '**Administrators**' on the client PC
- Logon to Windows **as the end user** (who will therefore now be an administrator)
- Then perform the following:
 1. (If necessary) Double-click on "AdbeRdr812_en_US.exe"
 2. (If necessary) Apply latest MS Office service pack file (for example "OfficeXpSp3-kb832671-fullfile-enu.exe")
 3. (If necessary) Configure Internet Explorer to bypass proxy
 4. Run "Trusted_Zone_add_Controller_APP_Server.vbs"
 5. (If necessary) Configure IE's "trusted zone" security zone to be "medium" (or lower) for IE6, and "medium-low" (or lower) for IE7
 6. Run "NetFx20SP1_x86.exe"
 7. Run "dotNET2.0_trust_<servername>.bat"
 8. Run "caspol_disable2.bat"
 9. Run "Check_CRL_certificate_disable.reg"
 10. Copy the file "Excel.exe.config" into the same location as where Microsoft Excel.EXE has been installed to
 11. (If necessary) Ensure that the end-user's Excel "Macro Security" setting is set to "medium" or lower
 12. Run "ControllerClient.MSI"
 13. Copy the file "Controller 8.4.URL" to the end user's desktop (inside their profile), so that they can easily launch the client
- Test as Administrator
- Remove end user from 'local Administrators' group, then test as the end user

As you can see, each of the above steps are very simple/straightforward, but they **all** do need to be performed in order to get Controller working correctly.

Most of this document is devoted to simply describing how to create the files (referred to above).

3 Prerequisites – Client and Server

3.1 Client PC Software pre-requisites

The current official supported environments of Controller 8.4 are listed here:

http://support.cognos.com/en/support/products/controller84_software_environments.html

To summarise the official web page, the most important/relevant sections are that your **client PC** should:

- be running **Windows XP Service pack 3** or **Vista SP1**
 - TIP: other operating systems and service packs are supported, but the most 'actively' tested (*therefore recommended*) client environments are WinXP SP3 and Vista SP1.
- Have MS **Internet Explorer 7** installed
 - TIP: IE6 is also supported, but the most 'actively' tested (therefore recommended) is IE7.
- Have MS Excel **XP** (2002), **2003** or **2007** installed, with the **latest MS Office service pack applied**

IMPORTANT:

- It is vital that you also install the latest Microsoft Office service pack (on each client PC) to ensure best performance/stability
- This is *especially* important for Excel XP (2002) where there is a known issue with Controller unless Office XP SP3 is installed

3.2 Application server - Disable Automatic Excel link Client install

By default (see picture on next page) the setting "InstallExcelLink" is set to "true", inside "Client Distribution Server Config".

This will mean that, if the end-user does not have a file %appdata%\Cognos\ccr\ccr.config inside his/her Windows profile, then the Controller website will automatically attempt to install ControllerClient.MSI to his/her PC.

This is a good idea if the end user is a local administrator, but often this is not the case (normally users are not local administrators on their PCs) and it will certainly not be true for deployment via Citrix.

Therefore, as a [best practice for most environments](#), please ensure that [InstallExcelLink is set to "false"](#) on your application server before continuing, because this document shall assume that all client software will be deployed *manually*.

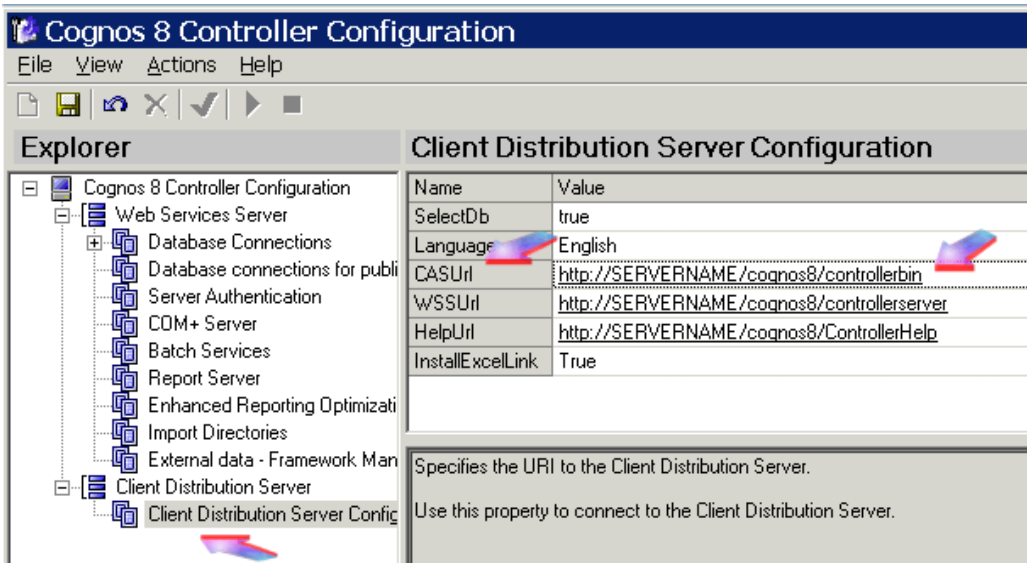
If you do not do this, you will find problems later, especially if using Citrix.

3.3 Server Naming Conventions

VITAL:

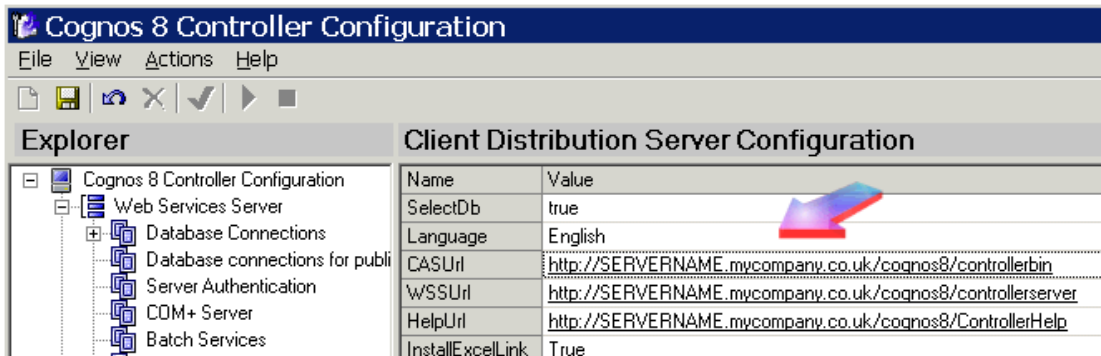
Later in this document, we shall talk about configurations that refer to the <servername> of your Controller server. This may be the NetBIOS name, or the FQDN (Fully Qualified Domain Name) of the server, or even something else (e.g. a "virtual" DNS name, for Disaster Recovery purposes). **You therefore *must* use the correct version of your server name at *all* times.**

The correct "naming convention" version that you **must** use is the one that is configured on your application server, inside the section "Client Distribution Server Config" inside "Controller Configuration":



In the above example, it is the NetBIOS name "SERVERNAME".

Remember, this is **different** from the 'FQDN' name (for example 'SERVERNAME.domainname.com' or whatever):



4 Creating a Software 'Repository' Share

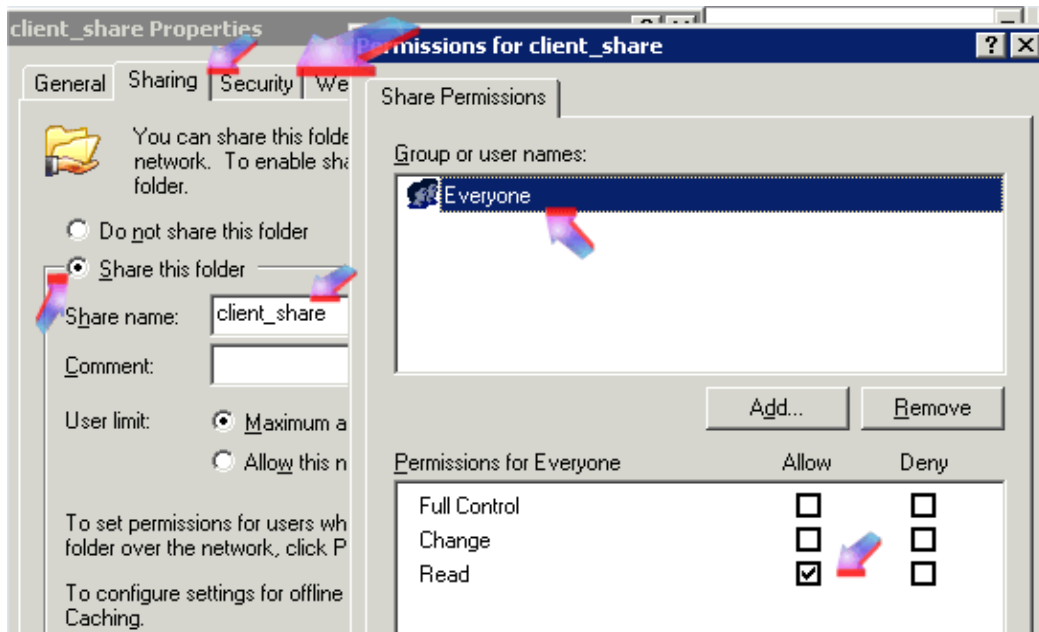
As a 'best practice', to make future client installs easier we shall create and populate a Controller "software repository share", from which to install the software in the future.

The intention here is to:

- invest 20 minutes of extra time now (creating and populating the share)
- this will make installing the client 'child's play' (saving 5 to 10 minutes per client PC)

4.1 Creating a share "client_share" on your Application Server

Create a share (for example `\\controllerserver\client_share`) on your Controller server and give the group "everyone" *read* permissions for both "share" *and* "NTFS" security (i.e. both the "sharing" *and* the "security" tabs below):



4.2 Populate share with the required Controller client software

Into this folder, we shall copy the following required software and scripts (*see later in this section for an explanation of each file*):

- .NET Framework 2.0 SP1 client ("NetFx20SP1_x86.exe")
- .NET Internet certificate check disable (batch file "caspol_disable2.bat")
- .NET 2.0 trust (batch file "dotNET2.0_trust_<SERVERNAME>.bat")
- MS Internet Explorer trusted zone addition (batch file "Trusted_Zone_add_Controller_APP_Server.vbs")

- MS Internet Explorer Certificate Check Disable (file "Check_CRL_certificate_disable.reg")
- EXCEL.EXE.config
- ControllerClient.MSI
- URL shortcut to Controller

Plus:

- Adobe Reader 8.1.2 (e.g. AdbeRdr812_en_US.exe)
- Latest Microsoft Office Service Pack (e.g. Office XP SP3 = OfficeXpSp3-kb832671-fullfile-enu.exe)

.NET FRAMEWORK 2.0 SP1 CLIENT

- this is the file "NetFx20SP1_x86.exe" (approx 24Mb)
- It is known as Microsoft .NET Framework 2.0 Service Pack 1 (x86)
- As this document was written, it was *currently* downloadable from here:
<http://www.microsoft.com/downloads/details.aspx?FamilyID=79bc3b77-e02c-4ad3-aacf-a7633f706ba5&DisplayLang=en>

VITAL:

You **MUST** use the **Service Pack 1** version of .NET 2.0 ("NetFx20SP1_x86.exe"), ***not*** the original version ("dotnetfx.exe").

Service Pack 1 can give **huge performance increases – some Controller tasks run three times quicker when using .NET 2.0 SP1.**

.NET INTERNET CERTIFICATE CHECK DISABLE (BATCH FILE "CASPOL_DISABLE2.BAT")

The job of this script is to speed up the execution of the Controller client in some environments.

To create this batch file, launch NOTEPAD.EXE and copy & paste the following text:

```
REM @echo off
REM Batch file updated 22nd May 2007
REM Created by Richard.Collins@Cognos.com
REM to disable .NET Framework 2.0 CASPOL checking
REM in order to make installation of Controller 8.2 client easy
REM

c:
cd c:\
cd %windir%
cd microsoft.net
cd framework
cd v2.0.50727
caspol -e off
```

Save this file as "caspol_disable2.bat"

TIP: Afterwards, you will have to change that the file extension, since NOTEPAD will (by default) save it as "caspol_disable2.bat.txt"

.NET 2.0 TRUST (BATCH FILE "DOTNET2.0 TRUST <SERVERNAME>.BAT")

To create this batch file, launch NOTEPAD.EXE and copy & paste the following text (in blue):

```
@echo off
REM Batch file created by Richard.Collins@Cognos.com
REM last updated - 28th March 2007
REM
REM Following lines add a .NET 2.0 trust
REM
REM Make sure that you change the "servername"...
REM ...to your Controller application server's name...
REM ...which may be NETBIOS or FQDN as appropriate
REM
REM Modify "Controller_servername" and "Controller_description"
REM if required (optional)

c:
cd %windir%\Microsoft.NET\Framework\v2.0.50727
caspol -q -m -ag "All_Code" -url http://SERVERNAME/* FullTrust -name "Controller_servername" -d "Controller_description"
```

Important: Modify the value of <servername> (highlighted in yellow) to match the exact value (NetBIOS or FQDN) of your server name inside 'Controller Configuration' (see earlier section 3.3).

Save this file as "dotNET2.0_trust_<SERVERNAME>.bat"

TIP: Afterwards, you will have to change that the file extension, since NOTEPAD will (by default) save it as "dotNET2.0_trust_SERVERNAME.bat.txt"

MS INTERNET EXPLORER TRUSTED ZONE ADDITION (BATCH FILE

"Trusted_Zone_add_Controller_APP_Server.vbs")

To create this registry file (*for more info, see KB 1037624*), launch NOTEPAD.EXE and copy & paste the following text:

```
' This script written 18th Dec 2007
' By Richard.Collins@Cognos.com
' to create an entry for http://controllersvr
' inside the 'trusted zone' for Internet Explorer
'
' [specifically for MS IE 6
' but may work on other versions]
' Tested on Windows XP Pro only
'=====
'ALWAYS examine VBS files before running them
'If you choose to use this, you do so at your own risk
'=====
```

```
'Declare and Set Windows Scripting Host Shell Object
DIM WshShell
SET WSHShell = WScript.CreateObject("WScript.Shell")

'Bypass Errors
On Error Resume Next

'uncomment out the next line if you want to change citrix to install mode
'wshshell.run "change user /install",1,True

' THE NEXT LINES should be modified
' so that controllersvr = <name_of_your_controller_server>

wshShell.RegWrite "HKCU\Software\Microsoft\Windows\CurrentVersion\Internet Settings\ZoneMap\Domains\<controllersvr>\http",
"2", "REG_DWORD"

'uncomment out the next line if you want to change citrix to normal mode
'wshshell.run "change user /execute",1,True

'End of Script
```

Important: Modify the value of <controllersvr> (highlighted in yellow) to match the exact value (NetBIOS or FQDN) of your server name inside 'Controller Configuration' (see earlier).

Save this file as "Trusted_Zone_add_Controller_APP_Server.vbs"

TIP: Afterwards, remember to change the filename's extension as appropriate.

MS Internet Explorer Certificate Check Disable (file

"Check_CRL_certificate_disable.reg")

To create this batch file (*for more info, see KB 1034825*), launch NOTEPAD.EXE and copy & paste the following text:

```
Windows Registry Editor Version 5.00
```

```
[HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\WinTrust\Trust
Providers\Software Publishing]
```

```
"State"=dword:00023e00
```

Save this file as "Check_CRL_certificate_disable.reg"

TIP: Afterwards, remember to change the filename's extension as appropriate.

EXCEL.EXE.config

To create this file, launch NOTEPAD.EXE and copy & paste the following text:

```
<configuration>
  <startup>
    <supportedRuntime version="v2.0.50727"/>
  </startup>
</configuration>
```

Save this file as "EXCEL.EXE.config"

TIP: Afterwards, remember to change the filename's extension as appropriate.

ControllerClient.MSI

This file is located inside `C:\Program Files\Cognos\c8\webcontent\CCR` on the Controller application server.

ADOBE READER 8 OR LATER (E.G. AdbeRdr812_en_US.exe)

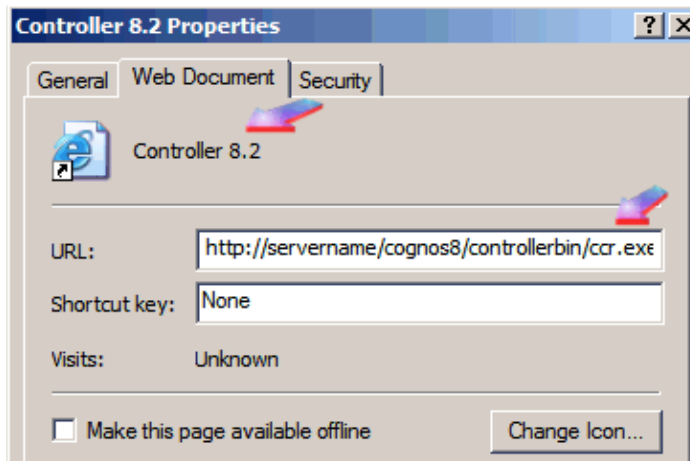
This (`AdbeRdr812_en_US.exe`) is downloadable from www.adobe.com

LATEST MICROSOFT OFFICE SERVICE PACK FOR YOUR USER'S MICROSOFT OFFICE VERSION (E.G. OFFICE XP SP3 = OfficeXpSp3-kb832671-fullfile-enu.exe)

These are downloadable from www.microsoft.com

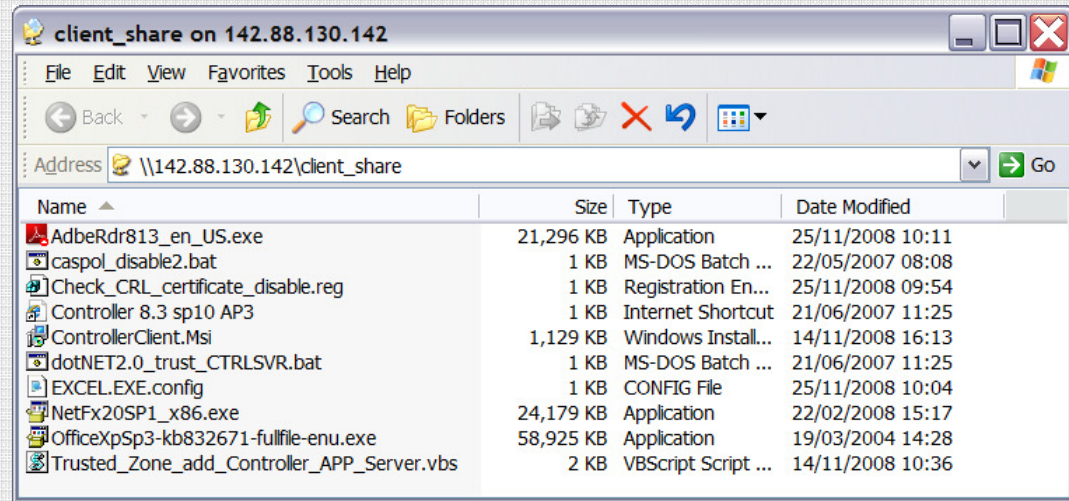
URL SHORTCUT TO CONTROLLER

Create a URL shortcut file, with a URL link destination similar to the following:



i.e. <http://servername/cognos8/controllerbin/ccr.exe>

As a result of all the work (above), you should now have a share that looks similar to the following:



5 Install Client Software on User's PC

5.1 Overview, plus extra requirement for Microsoft Vista

Many of the installation steps require administrative permissions.

- In many customer environments, you can install the Controller client whilst logged onto the end user's PC using *any* 'administrative' Windows user account
- However, to be 100% sure that all settings are correctly configured (for the end-user's profile) it would be **ideal** to:
 - Temporarily add the end user's Windows user account to the local 'administrators' group
 - Perform the following steps (below)
 - Launch Controller and briefly test
 - Afterwards, remove the end user's Windows user account to the local 'administrators' group

IMPORTANT: If you are using Windows Vista, there are some extra considerations / requirements:

- Before starting the installation, click 'Start - Control Panel' and open '**User Accounts**'
- In the User Accounts dialog box, **turn off the user account control** option.
 - (If you do not turn the user account control option off, during later deployment/testing the user will receive a message appears stating that the configuration parameters have changed, please contact your system administrator).
- **After the installation has finished** the 'user account control option' can be **switched on again**.

TIP: If you cannot turn off the user account control, then a workaround is described inside the author's separate document 'KB 1031830 - Supplement Guide for installing Controller 8.3 client on Microsoft Vista'.

5.2 Update third-party software

If necessary, upgrade Adobe Acrobat Reader and Microsoft Office.

For example

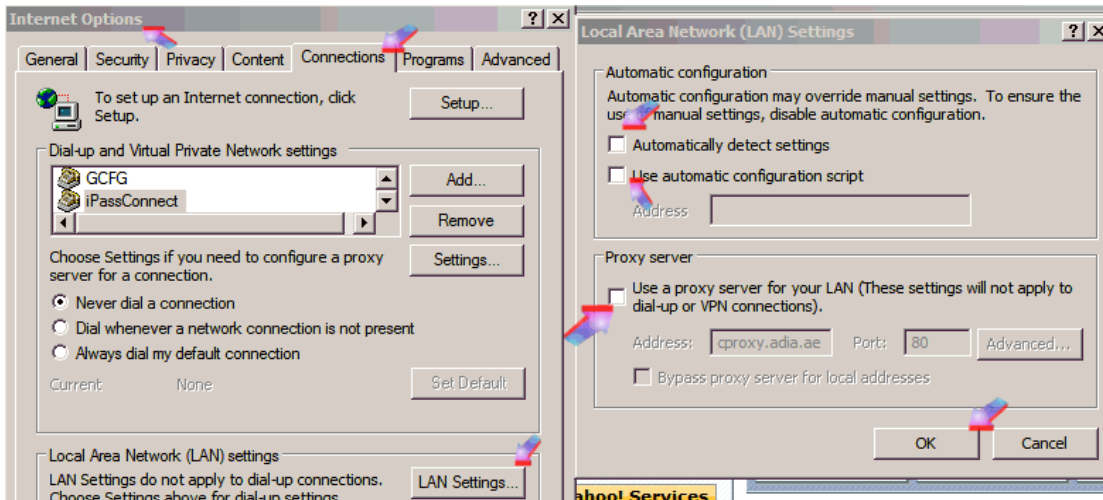
- Double-click "AdbeRdr812_en_US.exe"
- And then the appropriate MS Office service pack file (*for example* "OfficeXpSp3-kb832671-fullfile-enu.exe").

5.3 Internet Explorer – bypass your Proxy Server

For Controller to work properly, you should bypass your proxy server for all Controller communication.

- Launch Internet Explorer
- “Tools” – “Internet Options” – “Connections”

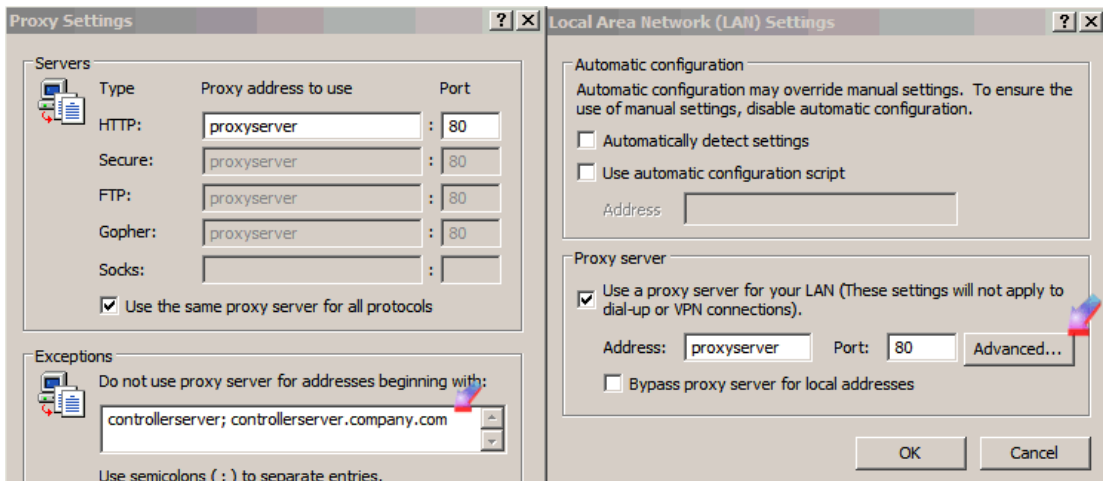
In an ideal world, all the boxes “Automatically detect settings”, “Use automatic configuration script” and “Use a proxy server...” should be unticked (see below):



However, if your company use a proxy server, then you need to “bypass” it to Controller:

- Click on “LAN Settings”
- Add an entry for the <servername> inside the section “Do not use proxy server for addresses beginning with”

TIP: In my screenshot below, I have added a second entry so that both the “NetBIOS” name and the “FQDN” name are *both* listed, just in case I change my mind later about the server name convention:



5.4 Internet Explorer – Trust Controller application server, to download code automatically

You must ensure that the client PC “trusts” the Controller server (so that it can download the .NET code). The easiest way is to simply:

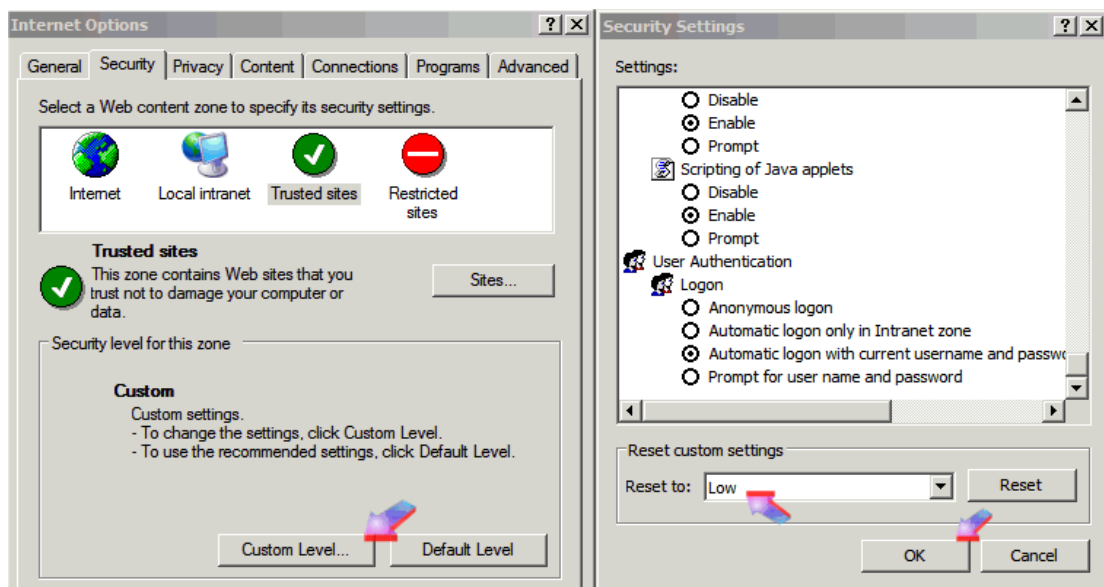
- Double-click “Trusted_Zone_add_Controller_APP_Server.vbs”

Alternatively, you can perform this step ‘manually’ – see [Appendix 2](#).

5.5 Configure “trusted zone” security zone to be “medium” (or lower) for IE6, and “medium-low” (or lower) for IE7.

The “trusted zone” security zone must be “medium” (or lower) for IE6, and “medium-low” (or lower) for IE7.

If you are not sure, you can reset the “trusted sites” zone security level to “low” – see screenshot below:



5.6 .NET Framework 2.0 SP1 client, .NET trust and disabling .NET certificate checking via internet

- Double-click on "NetFx20SP1_x86.exe" and accept all of the defaults
- Double-click on "dotNET2.0_trust_<servername>.bat"
- Double-click on "caspol_disable2.bat"

To avoid very slow client performance if your client PC does not have internet access, then:

- *Easy method:* Double-click on "Check_CRL_certificate_disable.reg"

Alternatively, you can perform this same step via the (manual) method in [Appendix 3](#):

5.7 Ensure Microsoft Excel uses .NET 2.0 for all of its Add-Ins

- Copy the file "Excel.exe.config" into the same location as where Microsoft Excel.EXE has been installed to
 - For example, the default location for Office 2003 is:
C:\Program Files\Microsoft Office\OFFICE11

5.8 Installing Controller Excel Add-in

TIP: There are 3 different types of Controller clients that you can install. The author recommends that for 99% of circumstances, you use the ControllerClient.MSI version.

⇒ See Appendix 1 for details on the alternative clients.

- Ensure that the end-user's Excel "Macro Security" setting is not set to "high". If it is, change to "medium"
 - For more information, see Cognos KB article 1024902 ("Excel error message The macro 'cc.DoDataEntry' cannot be found appears")
- Double-click on "ControllerClient.MSI"

5.9 Give end-user the URL shortcut

- Copy the file "Controller 8.4.URL" from the share to the end user's desktop (inside their profile), so that they can easily launch the client

5.10 Overall Summary of client install process

Once you have performed one client installation, you will be familiar with the process. Therefore, as an overall summary (for the future client installations) simply remember to open client share ([\\servername\client_share](#)) and then:

14. (If necessary) Double-click on "AdbeRdr812_en_US.exe"
15. (If necessary) Apply latest MS Office service pack file (for example "OfficeXpSp3-kb832671-fullfile-enu.exe")
16. (If necessary) Configure Internet Explorer to bypass proxy
17. Run "Trusted_Zone_add_Controller_APP_Server.vbs"
18. (If necessary) Configure IE's "trusted zone" security zone to be "medium" (or lower) for IE6, and "medium-low" (or lower) for IE7
19. Run "NetFx20SP1_x86.exe"
20. Run "dotNET2.0_trust_<servername>.bat"
21. Run "caspol_disable2.bat"
22. Run "Check_CRL_certificate_disable.reg"
23. Copy the file "Excel.exe.config" into the same location as where Microsoft Excel.EXE has been installed to
24. (If necessary) Ensure that the end-user's Excel "Macro Security" setting is set to "medium" or lower
25. Run "ControllerClient.MSI"
26. Copy the file "Controller 8.4.URL" to the end user's desktop (inside their profile), so that they can easily launch the client

6 Testing

Ideally, to 100% make sure that everything is working correctly, you should:

- **First** - launch Controller as the **Administrative** user (the one that you installed the software with) first
- **Second** - after the initial testing, logoff and logon as the "**normal**" end-user and test as him/herself.

6.1 Main Controller program

Launch Controller from URL and login. Click on "Help" – "About Controller" and ensure that the Controller version matches what you expect.

6.2 Excel link

Launch Excel. Click on "Help" – "About Controller link" and ensure that the Controller link version matches what you expect.

7 Installing on a Citrix (or Terminal Services) server

7.1 Scenario

Deployment of Controller on Microsoft (Windows 2000/2003) Terminal Services is exactly the same concept as deployment on Citrix. Therefore, for the sake of simplicity, this document shall refer both scenarios simply as "Citrix".

Deploying Controller via Citrix is *extremely* common – it is probably that the majority of customers do this. It is very straightforward, and should present no difficulty.

One of the main reasons for deployment via Citrix is that remote WAN users may have poor network connections to the central system. As a guide, Controller typically requires 256kbps – 512kbps bandwidth per concurrent user (and a network latency of less than approx 100ms) in order to have good performance. Utilising Citrix allows deployment of Controller to remote users whose network connections are poorer than this (e.g. as poor as approximately 30kbs and up to 250-300ms round-trip network latency).

7.2 Overview:

Installing Controller on a Citrix server is (essentially) exactly the same as installing on a "normal" client PC.

However, when installing any software on a Citrix server, the following precautions should always be taken:

- Ensure that **no other users have a session** on the Citrix server
- Logon to the "console" session, for example:
 - Walk up physically to the Citrix server to logon there
 - Or remotely logon to the 'console session' via `mstsc.exe /console`
 - Or remotely logon via proxy software such as VNC
- In general, software should always be installed when inside "install mode", for example by doing the following:
 - Install everything via 'Add/Remove Programs'
 - or (alternatively) use the DOS command `change user /install` before installing software, and use the command `change user /execute` when the software has finished installing

TIP: In the following sections, I have highlighted the parts where the Citrix server should be in "install mode" in **purple**.

=> Make sure that the Citrix server is in 'install mode' for these **purple** sections!

7.3 Preparing the Citrix server:

- **Disable Data Execution Prevention**

Citrix XP does not run the 'iexplore.exe' process on Citrix XP when the server has Microsoft's DEP enabled. To fix this there are 2 options:

1. Disable DEP on the server
2. Remove the following key on the server:
`HKLM\Software\Citrix\CtxHook\AppInit_DLLS\speedscreen\iexplore.exe`

- **Disable Automatic Excel link client install (step performed on the APP server)**

VITAL: As recommended inside section 3.2 of this document, for Citrix server it is VITAL that you ensure that the setting "InstallExcelLink" is set to "false", inside "Client Distribution Server Config".

If you do not do this, then (by default) when new users logon to the Citrix server, the system will (unnecessarily) try to re-install the `ControllerClient.MSI` client software.

7.4 Controller Client Installation

After doing the above pre-requisite steps, you simply perform exactly the same tasks as you would for a 'normal' (non-Citrix) client install.

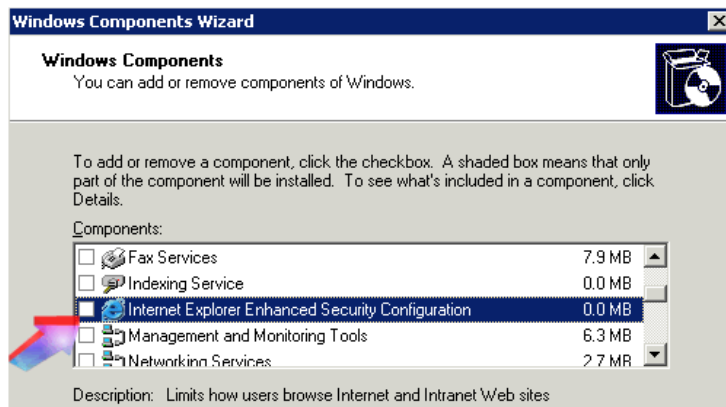
In other words, you follow the same steps as described inside section 5 of this document. If you require more details whilst performing this section, please refer back to that section (5).

IMPORTANT: Remember, the sections in **purple** should be during whilst the Citrix server is configured to be inside "install mode" !

- Check pre-requisites are already installed
 - Windows 2003 **Service Pack 2**
 - Microsoft Office with **latest service pack**
 - Internet Explorer **7**
 - Microsoft .NET 2.0 **Service Pack 1**
 - **< etc. >**
- Ensure Adobe Acrobat Reader 8.12 is installed.
 - **Install/upgrade if necessary**

TIP: Afterwards, launch Adobe Reader at least once (to ensure that the license agreement is 'accepted') to avoid problems later.

- Check Internet Explorer settings:
 - **IMPORTANT:** Ensure that "Internet Explorer Enhanced Security Configuration" is ***not*** ticked/enabled



- Ensure that Internet Explorer does not have a proxy server configured
 - If necessary, bypass your Proxy Server for the Controller website
 - **TIP:** This is normally on a per-user basis, so you
- Add Controller website to trusted zone, and check zone security settings

- Configure Microsoft .NET 2.0 SP1:
 - Install "NetFx20SP1_x86.exe" (unless already installed)
 - Run "dotNET2.0_trust_<servername>.bat"
 - Run "caspol_disable2.bat"
 - Run "Check_CRL_certificate_disable.reg"
- Copy 'Excel.exe.config' file to EXCEL.EXE location
- Check Excel "Macro Security" setting. If necessary:
 - change to 'Medium or lower' and tick "trust all add-ins and templates..."
- Run "**ControllerClient.MSI**"
- Test Controller, by launching it whilst still logged on as an administrator:
 - Launch Controller program
<http://controllerserver/cognos8/controllerbin/ccr.exe>
 - Login and click on "Help" – "About Controller"
 - Ensure that the Controller version matches what you expect.
 - Launch Excel
 - Click on "Help" – "About Controller link"
 - ensure that the Controller link version matches what you expect.
- Create a new Citrix Published application to the Controller 8.4.URL
 - e.g.
<http://controllerserver/cognos8/controllerbin/ccr.exe>
- Test the published application as an administrator
 - **TIP:** when Controller has launched, click on the "Excel" shortcut (on the menu bar) to launch Excel, so you can check the Excel link
- Finally, test the Citrix published application as a "normal" (non-administrative) user

7.5 Additional tips for Citrix / Terminal Server deployments:

- **Stability:**

- Request that there is a weekly period of downtime for an automated Citrix server reboot (e.g. every Sunday morning at 5am), as a proactive measure to clear out any potential 'memory leaks'

- **Installation to non-default folder location**

By default, ControllerClient.MSI will install the "Excel link" files in the directory C:\Program Files\Cognos\ccr. This location is taken from the %programfiles% variable

- If required, you can manually force it to install to a different folder, for example:

```
"msiexec /i controllerclient.Msi COGNOSDIR=d:\myinstallfolder
DOTNETDIR=d:\myinstallfolder"
```

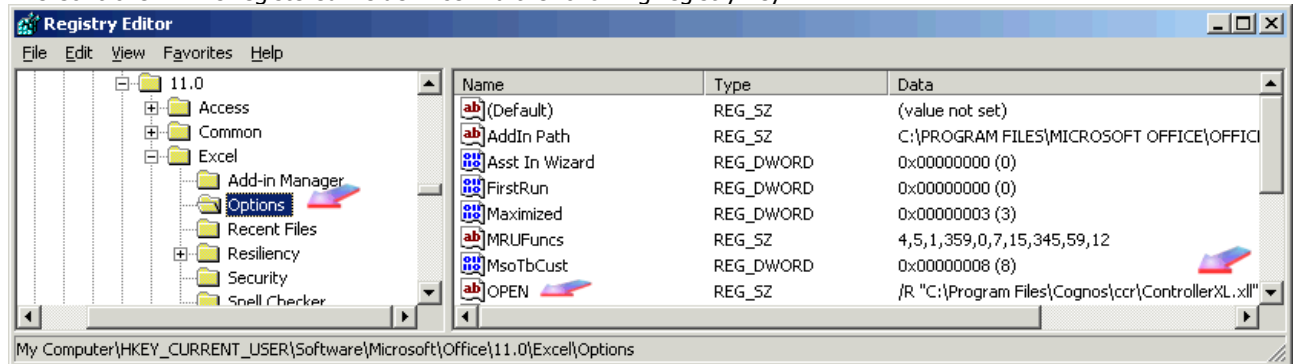
NOTE: If this fails, or has an error, you can diagnose this by using the following command:

```
msiexec /i controllerclient.msi /log error.txt
```

This will output the installation activity and information to a text file, which we can use to diagnose the problem.

- **Mandatory Profiles - Manually Registering Excel link**

The Controller link is registered inside Excel via the following registry key:



For example, for Office XP/2002, this is:

```
[HKEY_CURRENT_USER\Software\Microsoft\Office\10.0\Excel\Options]
"OPEN"="/R \"C:\Program Files\Cognos\ccr\ControllerXL.xll\""
```

From Controller 8.1MR1 onwards, it will automatically add this entry when Excel is launched from the main Controller program itself. Therefore, for 95% of environments, there is no more that you need to do.

However, in certain environments (e.g. where there are "mandatory" Windows profiles in use), you may need to ask the I.T. administrator to ensure that this registry key is added during logon (e.g. via USRLOGON.COMD).

- **Printing Optimisation**

The default setting for a published application is "Start this application without waiting for printers to be created". However, we have seen occasional problems with this. Therefore, we recommend that you do **not** tick this box for Controller.



- **Profile management - Problem with large profiles?**

The Cognos Controller 8 client uses the Windows profile location for storing personal settings, cache files and some .NET technology business logic files.

- The *client personal settings* are stored by default in:
c:\Documents and Settings \%username%\Application Data\Cognos\ccr\ccr.config
- *Client cache* files are located in:
c:\Documents and Settings \%username%\Application Data\Cognos\ccr*.dss en *.dss
- *.NET assembly cache*:
C:\Documents and Settings\%username%\Local Settings\Application Data\assembly\dl2*.*

For TS/Citrix servers this would mean that a profile would need considerable space available. When space is limited for profile sizes, Cognos advises to redirect the profile location for TS/Citrix users onto a larger drive using the directions mentioned in <http://support.microsoft.com/kb/322014/en-us>. If profile size management is needed, a logoff script can be used to clean the users Client cache and assembly cache directory.

In addition, consider installing "UPHClean" - UPHClean-Setup.msi. This Microsoft tool causes Citrix/Terminal Servers to handle profiles (and file locks) in a different (typically improved) way.

By default, Controller will store some cache files (e.g. *.rs) inside the folder %APPDATA%\Cognos\Controller.

- Workaround #1: It is possible to assign logoff cleanup scripts (e.g. see http://www.microsoft.com/windows2000/en/advanced/help/default.asp?url=/windows2000/en/advanced/help/gptext_logoffscripts.htm)
- Workaround #2: Alternatively you can try using the unsupported 'local preference': clearcacheonexit
... true

[This will clear the local cache, but obviously the cache is there for a reason – to speed up user's sessions].

- **Miscellaneous Tip**

If (for whatever reason) you find that there is a process (e.g. Access Manager's common logon) which is not cleanly exiting when a user logs off from Citrix, then you can kill any process (at logoff when using Citrix) with the following key (this sample kills the "common logon" process, but can be modified):

```
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Citrix\wfshell\TWI
LogoffCheckSysModules REG_SZ = WinLogonServer.exe
```

8 Appendices

8.1 Appendix 1 – Alternative Controller client types

Controller 8.4 has 3 different types of client installation MSI:

- `ControllerClient.Msi`
- `ClientAdmin.Msi`
- `CCRLocalClient.Msi`

Full details of the differences between these three are discussed inside the author's KB article #1035237.

For example, in some environments it may be best to deploy the `CCRLocalClient.Msi` client. Typically this is at a very locked-down environment (for example, some Citrix environments, and also some non-Citrix environments where the end user's Internet Explorer is heavily 'locked down').

IMPORTANT:

If you choose to *not* use the 'ControllerClient.MSI' file, then it is **VITAL** that you disable 'Automatic Excel link Client install' (see page 5).

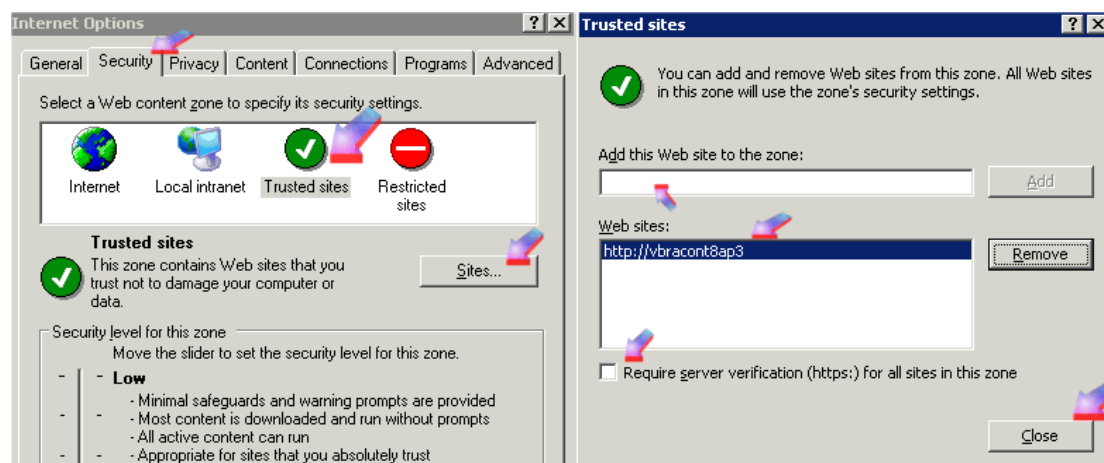
TIP: If you deploy the '`CCRLocalClient.Msi`' client, then you will be asked for the WSS and HELP URL locations when installing. By default, these are:

- `http://[servername]/cognos8/controllerserver`
- `http://[servername]/cognos8/controllerhelp`

8.2 Appendix 2 – Manual method of configuring MS Internet Explorer trusted sites

To perform this step manually, do the following:

- Launch Internet Explorer
- "Tools" – "Internet Options" – "Security"
- Highlight "Trusted sites" and click on "sites"



- Untick the box "require server verification (https:)"
- Add the site <http://servername> to the list
- Click "close"

8.3 Appendix 3 – Manual method of configuring MS Internet Explorer Publisher's Certificate revocation

1. Launch Internet Explorer
2. Click 'Tools - Internet Options'
3. Click tab 'Advanced'
4. Scroll down to section 'Security'
5. Untick the box next to 'Check for publisher's certificate revocation'