

ESRI[®] Business Analyst[™] 9.3.1 Enterprise Deployment

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ESRI Business Analyst 9.3.1 Enterprise Deployment

An ESRI White Paper

Contents

Page

Executive Summary	1
Section 1: Preparing for Business Analyst Installation	1
Section 2: Command Line Syntax Examples	2
Crystal Reports XI Silent Installation Crystal Reports XI Service Pack 2 Silent Installation NET Framework 2.0 Silent Installation ArcGIS Desktop 9.3.1 Silent Installation Business Analyst Desktop 9.3.1 Silent Installation Business Analyst Desktop 9.3.1 Service Pack 1 Silent Installation Business Analyst Data License Activation	3 3 3 4
Section 3: SCCM Configuration for Business Analyst	5
Conclusion	9

J-9879

ESRI Business Analyst 9.3.1 Enterprise Deployment

Executive Summary

ArcGIS® Desktop software deployments can be managed automatically through Microsoft® System Center Configuration Manager (SCCM), formerly Systems Management Server (SMS). ESRI issued a technical white paper concerning ArcGIS 9.3 enterprise deployment that includes a detailed discussion of deployments of ArcGIS setups using SCCM. The white paper can be found online at <u>http://resources.arcgis.com/content/white-papers?fa=viewPaper&PID=66&MetaID=1427</u>.

Business Analyst[™] Desktop is an extension of ArcGIS Desktop. While the deployment of Business Analyst Desktop via SCCM is not certified by ESRI, tests indicate that it can be successfully deployed using this mechanism. It should be noted that a complete deployment of Business Analyst Desktop involves approximately 16 GB of data. Network traffic load should be taken into careful consideration if there is a plan to install several Business Analyst Desktop instances over the network.

This document is divided into three sections. The first section provides instructions on copying the DVD installation media to support the installation of Business Analyst and all prerequisite components through SCCM. The second section provides command line examples and syntax for installing Business Analyst and all prerequisites. These command line examples will be used in the final section of the document, which provides an illustrated guide to configuring SCCM for deploying Business Analyst.

Section 1: Preparing for Business Analyst Installation

The complete Business Analyst 9.3.1 installation is composed of three separate DVDs. To install Business Analyst 9.3.1 silently, the installations must be available on a local or network share. The contents of the DVDs are as follows:

- Disk 1—Contains prerequisite programs (Crystal Reports[®], .NET Framework, etc.) and a preinstallation utility that checks for needed or unneeded software (approximately 2.3 GB)
- Disk 2—Contains the Business Analyst 9.3.1 software and data setup except for geocoding data and locators (approximately 8 GB)
- Disk 3—Contains all geocoding data and locators (approximately 7.9 GB)

The primary Business Analyst software and data installation spans DVDs 2 and 3. These contents must be copied to a network or local share prior to installation by command line or through SCCM deployment. To properly prepare Business Analyst for a silent installation, do the following:

- 1. Copy the contents of Disk 1 to a local drive or network location.
- 2. Copy the contents of Disk 2 to a local drive or network location—preferably, the same root location as Disk 1.

J-9879

- 4. Copy the Disk3\ArcGIS\Business Analyst\Data\USA Geocoding Service folder and its contents from Disk 3 to Disk2\ArcGIS\Business Analyst\Data.
- 5. Confirm that the new Disk2\ArcGIS\Business Analyst\Data structure (approximately 16.6 GB) contains the following folders:
 - \BDS
 - \DMM Shopping Centers
 - ESRI Data
 - \InfoUSA Data
 - \StreetMapData
 - \USA Geocoding Service

Section 2: Command Line Syntax Examples

The Business Analyst 9.3.1 installation includes the following components, which should be installed in the order as shown:

- Crystal Reports XI
- Crystal Reports XI Service Pack 2
- .NET Framework 2.0
- ArcGIS Desktop 9.3.1 (including the ArcGIS Network Analyst extension and .NET Framework 2.0 Support)
- Business Analyst Desktop 9.3.1
- Business Analyst Desktop 9.3.1 Service Packs

For more information on installing Business Analyst, consult the installation instructions on the installation media or the ESRI Resource Center:

http://resources.esri.com/help/9.3/BusinessAnalyst/Docs/Desktop/Install_BA.htm

Note: All installations must be run under an administrator account.

The following are command line (silent installation) examples for Business Analyst Desktop 9.3.1 and its prerequisite software installations.

Crystal Reports XI Silent Installation Crystal Reports is required to support the reporting capabilities in Business Analyst and must be installed prior to installing Business Analyst. The following is an example of the command line syntax for installing Crystal Reports:

msiexec /i "\\your_network_share\BA931DVD1\Crystal Reports
XI\win32\CrystalReports.msi" REBOOT=ReallySuppress
TRANSFORMS=:1033 /qb INSTALLDIR="C:\Program Files\Business
Objects\" COMMONVERDIR="C:\Program Files\Common Files\Business
Objects\3.0\" ADDLOCAL=ALL

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	This installs Crystal Reports XI build 11.0.0.1282.
Crystal Reports XI Service Pack 2 Silent	Crystal Reports Service Pack 2 is required to resolve several problems involved in creating summary reports with Business Analyst.
Installation	"\\your_network_share\BA931DVD1\Crystal Reports XI\Service Pack 2\setup.exe" -s -f1"\\your_network_share\BA931DVD1\Crystal Reports XI\Service Pack 2\setup5.iss" -f2"C:\Temp\log.txt"
	This updates the build number to 11.0.0.1994.
.NET Framework 2.0 Silent Installation	.NET Framework 2.0 needs to be installed on all Windows [®] XP systems prior to installing Business Analyst. If .NET Framework 2.0 is not present on Windows XP systems, it can be installed using the following syntax:
	"\\your_network_share\BA931DVD1\DotNet20\dotnetfx.exe" /q:a /c:"install /q"
	.NET Framework 2.0 is not an installation requirement on Vista or Windows 7 systems, as both operating systems are already bundled with .NET Framework 2.0. For more information about this installation, consult the Microsoft Developer Network support library at <u>http://msdn.microsoft.com/en-us/library/aa480242.aspx</u> .
ArcGIS Desktop 9.3.1 Silent Installation	Three .msi files need to be run for the ArcGIS Desktop 9.3.1 installation (one .msi for ArcGIS itself and two for installing Visual Basic [®] for Applications [VBA] components that are required to operate Business Analyst). You can find detailed information about ArcGIS silent installations in the Install.htm file located under the <arcgis_setup_location> root folder. The following example illustrates how to install ArcGIS with the required Network Analyst extension:</arcgis_setup_location>
	<pre>msiexec /i "\\your_network_share\ArcGIS_Desktop\setup.msi" ADDLOCAL=ArcMap,ArcCatalog,ArcReader,NetworkAnalyst,Python, .NET_Support,CivicAndBusiness,NaturalResources,TemplateGeneral, TemplateIndustry,TemplateWorld,TemplateUSA ESRI_LICENSE_HOST=your_license_manager SOFTWARE_CLASS=Editor /qb</pre>
	You can configure installation folders for ArcGIS and Python [®] at the command prompt and set other features to be installed using the ADDLOCAL property.

C:\>msiexec /i "\\jupiter\commercial\Shared\CMelera\BA\BA_For_9.3.1\BA_USA_9.3.1 .344_Final\BA931DVD1\Crystal Reports XI\win32\CrystalReports.msi" REBOOT=ReallyS uppress TRANSFORMS=:1033 /qb INSTALLDIR="C:\Program Files\Business Objects\" COM MONVERDIR="C:\Program Files\Common Files\Business Objects\3.0\" ADDLOCAL=ALL

J-9879

Administrator: Command Prompt

	<pre>msiexec /I "\\your_network_share\ArcGIS_Desktop\VBA\ VBAOF11.msi" /qb</pre>
	<pre>msiexec /I "\\your_network_share\ArcGIS_Desktop\VBA\ 1033\VBAOF11i.msi" /q</pre>
Business Analyst Desktop 9.3.1 Silent Installation	The complete installation of Business Analyst 9.3.1 software and data comprises three separate dual-layer DVDs. To install Business Analyst 9.3.1 silently, the main Business Analyst installation on DVDs 2 and 3 must be copied to a network or local share prior to installation, as outlined in section 1 of this document. See section 1 for more information about preparing the silent installation.
	After preparing the Business Analyst software and data components on a network or local share, you can use the following command line syntax to install Business Analyst:
	<pre>msiexec.exe /i "\\your_network_share\BA931DVD2\Setup.msi" /qb</pre>
Business Analyst Desktop 9.3.1 Service Pack 1 Silent	The latest Business Analyst service pack should be applied after Business Analyst is installed. The latest service pack can be downloaded from the ESRI Support site at the following location:
Installation	http://resources.arcgis.com/content/patches-and-service-packs?fa=listPatches&PID=78
	As an example, service pack 1 for Business Analyst 9.3.1 can be installed with the following syntax:
	<pre>msiexec.exe /update "\\your_network_share\BA_USA_9.3.1_SP1_390\ BA931SP1.msp" /qb</pre>
Business Analyst Data License Activation	The Business Analyst data license (*.sdlic) must be applied to each individual machine to unlock and view all licensed datasets. To manually activate the Business Analyst data license, copy the *sdlic file to the local machine where Business Analyst is installed and double-click it. See the following link for more information on the Business Analyst data license:
	http://webhelp.esri.com/arcgisdesktop/9.3/index.cfm?TopicName=Data_License
	If you need to silently activate the Business Analyst data license, copy the data license to a shared location and use the following two command examples:
	<pre>mkdir "C:\Program Files\ESRI\DataLicense"</pre>

components that are required for Business Analyst:

The following are examples of the command line syntax for installing ArcGIS VBA

copy "\\your_network_share\your_BA_data_license.sdlic"
 "C:\Program Files\ESRI\DataLicense\your_BA_data_license.sdlic"

Section 3: SCCM Configuration for Business Analyst

Business Analyst can be installed using SCCM with some minor configuration changes. This section provides examples of how to prepare the installation for deployment. Key changes to the Data Source tab default settings should be made as illustrated below. One thing to note on this screen is that **Enable binary differential replication** is selected. This will speed up replication on the package if any changes are needed.

ESRI Business Analyst 93.1 EN Properties
General Data Source Data Access Distribution Settings Reporting Security
Specify whether this package contains source files. If it does, specify the initial location of the files and set additional source file options.
Ihis package contains source files
Source version: 5 (2/10/2010 9:23:16 PM)
Source directory
<directory on="" server="" site="">d:\sourceFiles\Busi</directory>
 Use a <u>compressed copy of the source directory</u> Always <u>obtain files from the source directory</u>
Update distribution points on a schedule
Occurs every 1 day(s) effective 2/16/2010 11:40 Schedule
Persist content in the client cache Image: Content in the client cache Image: Content in the client cache
Enable binary differential replication
OK Cancel Apply Help

In the next step, configure the Business Analyst installation to run silently. In the example below, *msiexec* is used to run the installation, as illustrated in section 2 of this document. The following command line syntax is used to install Business Analyst:

```
"msiexec.exe /i Setup.msi /qn"
```

InstallBusAnalyst Properties	-	-			x
Windows Installe	r l	MOM Ma	aintenanc	e Mode	
General Rec	quirements	Environmen	t	Advanced	
Na <u>m</u> e:	InstallBusA	nalyst]
Your use of software de terms. You should review software.					
<u>C</u> omment:	WC 2/9/10			۸ ۳	
C <u>o</u> mmand line:	msiexec.exe	e /i Setup.msi /qr		<u>B</u> rowse]
<u>S</u> tart in:					
<u>R</u> un:	Normal			•]
After r <u>u</u> nning:	No action r	equired		•]
Ca <u>t</u> egory:	Software Di	stribution		•]
	ОК	Cancel	Apply	Help	

InstallBusAnalyst Pr	operties		×
Window	vs Installer	MOM Maintenan	nce Mode
General	Requirements	Environment	Advanced
A program's re computer.	quirements determine	whether it is appropriate	e for a particular
Estimated <u>d</u> isk	space:	Unknown	KB 🔻
<u>M</u> aximum allo	wed run time (minutes)	120 -	•
This progra	ım <u>c</u> an run on any platf	orm	
This progra	m can run <u>o</u> nly on spe	cified client platforms:	
All IA64 V	/indows Server 2003 (N	on R2)	*
	Vindows Server 2008		
	indows Server 2003 (No	n R2)	-
Additional <u>r</u> equ			
			A
	ОК	Cancel Apply	Help

The Requirements tab can be left with the defaults. However, you can specify the disk space required to be sure that enough is available for the installation.

On the Environment tab, you may want to change how the program can run to the option **Whether or not a user is logged on** to the machine. Also, you will need to select **Run with administrative rights**. The other tabs can be left with default settings.

InstallBusAnalyst Pr	operties	The space was	×
Window	s Installer	MOM Maintena	nce Mode
General	Requirements	Environment	Advanced
	/ require certain condit ditions that must be m		
Pr <u>o</u> gram can ru	in:	Whether or not a us	er is logged o 🔻
-Run mode			
Run with	us <u>e</u> r's rights		
<u> R</u> un with	administrative rights		
Allo <u>w</u> us	ers to interact with this	program	
Drive mode			
Runs with	n <u>U</u> NC name		
Requires	drive le <u>t</u> ter		
Requires	<u>s</u> pecific drive letter (exa	ample: Z):	
Reconnec	ct to <u>d</u> istribution point	at logon	
	ОК	Cancel Apply	y Help

J-9879

Config	uration Mana	iger Prop	erties			?
eneral	Components	Actions	Advanced	Updat	es Confi	gurations
	n configure the ents installed (he Confi	guration N	lanager
	Configu	re Settings				
Config	Mgr Site					
Currei	ntly assigned to	o <u>s</u> ite code	:	RED	Disco	ver
To au	tomatically find	the local :	site code, cli	ck Disco	over.	
Speci	fy or modify a l	DNS suffix	for site assig	nment b	elow:	
esri.c	om					
Amou	orary Program at Location: ant of disk space ange Location	C:\Wir e to <u>u</u> se: (1	ndows∖SysV MB)	1	\CCM\Cac	he
			ОК	Car	ncel	Apply

On the client side, the SCCM cache needs to be large enough to contain the entire 17 GB download.

This can be modified on the client; there are also other ways to automatically increase it. For more details, you will need to consult SCCM documentation and support materials.

Conclusion Successful enterprise deployment requires good planning and implementation of your system environment. To successfully deploy a Windows Installer package, you should have a solid understanding of your chosen enterprise deployment tool. This paper does not attempt to introduce you to or educate you on the usage of SCCM. An in-depth understanding of your chosen deployment tool is required. For more information on SCCM or other deployment tools, consult <u>www.microsoft.com</u> and your product documentation.

For more information about Business Analyst, consult the ESRI Resource Center:

http://resources.arcgis.com/content/business-analyst-suite



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