


# Strategic Deployment of Applications in a Citrix Environment

**Introductions**

**Dan Johnson**  
Consultant  
**Xenon Consulting, Inc.**  
<http://www.xenonc.com>

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**The Situation**

- The situation:
  - Release of thirty new Business Objects  
5.x reports to Sales Representatives
  - Over 100 new users need the Business Objects Desktop (Full) Client
  - The Majority of users were off-site (remote locations)

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**The Constraints**

- Major Constraints:
  - Limited resources for deployment
  - No administrative resources in the remote user locations
  - Many different computer configurations across the intended user base (this ruled out an SMS distribution)

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## The Solution

- The Solution:
  - Deployed Business Objects 5.x on two servers running Citrix MetaFrame software
  - Resulted in one software installation for the entire user base; provided a centralized architecture
  - Users accessed the Business Objects desktop application via the web

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## What is Citrix?

- Citrix MetaFrame Presentation Server was the product we used:
  - Allows users to access client applications via a corporate intranet (or the Internet)
  - The application processes all run on the server
  - Similar to working on a remote server via terminal services, except access can be locked down to the individual application level

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## Key Advantages - Administrator

- Key advantages for the administrator include:
  - One installation vs. hundreds
  - Customized load-balancing
  - Applications can be monitored by the server team through alerts
  - Sessions can be shadowed, allowing administrators to see exactly what workflow may be causing issues for the user
  - Multiple applications can be pushed to individual users or Active Directory Groups
  - Can configure Single Sign On (SSO) using the user's network ID and password
  - Allows remote administration for the servers running the Citrix software

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## Key Advantages – End-User

- Key advantages for the end-user include:
  - The look and feel of a normal desktop application is maintained
  - Server performance levels without tying up the user’s workstation
  - Works over the Internet and wireless connections, allowing connectivity when it might not otherwise be possible
  - Keeps an open session when network connectivity is lost, allowing the user to start where they left off when connectivity is resumed
  - The user can print to their default printer, or browse to an alternative printer on the network

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## Deployment Specifics

- Key notes on our deployment:
  - Two servers:
    - Dual 1.4GHz Pentium III processors
    - Windows 2000 Server (SP3)
    - 20GB Hard Drives
    - 2GB of RAM
    - Initially ran Business Objects v5.1.3, but upgraded to v5.1.6 shortly after initial testing

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## Scalability & Performance

- Stress test parameters:
  - Took our worst-case report (twenty data providers, eleven report tabs, complex calculations performed at the lowest grain of information)
  - Set the report to continuously refresh
  - Opened 25 sessions of Business Objects
  - In each session, we ran the report for a case which represented 25% of the Book of Business
  - No glitches or errors
  - We stopped at 25 sessions because that met our need for concurrent users

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## Installing the Web Client

- Choose "Yes" to allow the Citrix ICA Web Client to install:



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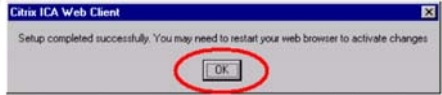
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## Completing the Web Client Install

- You'll notice several files being copied onto the hard drive:



- Select "OK" (you WILL NOT need to restart your web browser):



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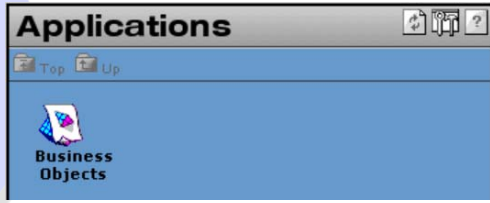
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## Launching the Application

- You'll now see an Applications folder, click on the Business Objects icon to launch the Business Objects desktop client application:



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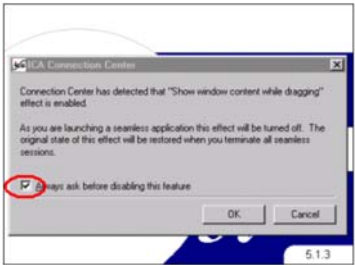
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### Seamless Application Dialog

- If you see the following dialog box, uncheck the selection and click on OK:



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### The New Report Wizard

- A first-time user would see the New Report Wizard, you can uncheck the “Run this Wizard at Startup” box and select Cancel:



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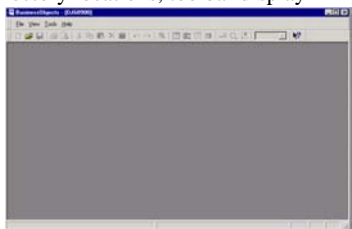
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### Initial Configuration

- You'll now see your Business Objects Client
- Make any changes as you would for a new installations (directory locations, toolbar display options, etc...)



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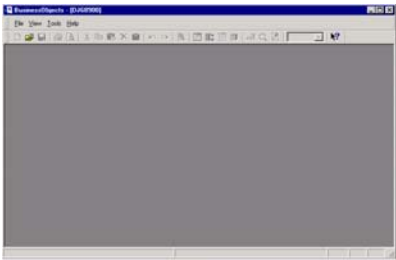
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## Typical Workflow

- Navigate to the Citrix URL
- Log in to Citrix
- Select the Application
- The BO Client will appear





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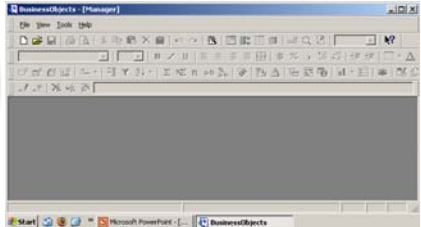
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## Working with the Client on Citrix

- A few notes about working with the BO client through Citrix:
  - The application appears in your toolbar just as any other application
  - Print options will be exactly the same as you would see through any other application





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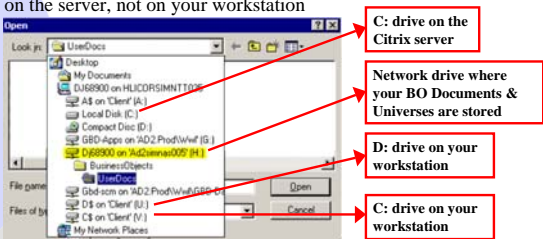
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## Saving Files on Citrix

- By default, your Business Objects Documents and Universes will be saved to your network drive, as shown below
- Remember, the "C:" drive you see in this dialog is the "C:" drive on the server, not on your workstation





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## Workflow - Adding a New User

- The workflow for adding the user will be very similar to how it's currently done in Business Objects
  - Obtain the user's network ID
  - Using BO Supervisor, add the user to the appropriate group
  - In the Citrix Administration tool, add the user to the group which has access to the Business Objects application
  - Have the user navigate to the Citrix home page, log in, and follow the instructions on the previous slides to install the Citrix ICA Web Client

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## Unexpected Benefits – BO Specific

- After we had selected the Citrix solution, we experienced some unexpected benefits:
  - **Faster Performance** – performance was spectacular; roughly the equivalent of an interactive Business Objects session on a BCA
  - **QA Environment** - the Citrix environment was used extensively for Quality Assurance, as the environment was much faster than running reports on a user's desktop
  - **BO Version Testing** – the stand-alone environment made an ideal platform for testing newer versions of Business Objects without interfering with our existing desktop installations

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## Unexpected Benefits – Other Apps

- We also experienced some benefits of Citrix outside of the Business Objects application:
  - **Place for Older Versions of Software** – Citrix allowed us to sunset an Access97 application that would have otherwise not been supported
  - **Multiple Applications** – Several applications were installed on the Citrix servers in addition to Business Objects
  - **Offshore Work** – The two Citrix servers supported our division's Offshore initiative, including production support

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## Offshore – The Situation

- Here's the background of how Citrix became our point-of-entry for all of our division's work being done Offshore:
  - **No Network Connectivity** – remote users could not access our network; several attempts at establishing this connectivity had already failed
  - **Looming Deadlines** – project deadlines were already at risk, because no work could be started without network connectivity
  - **Multiple Applications** – Offshore resources needed access to a variety of applications for both Development and Production Support work

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## Offshore – The Solution

- What we did to establish connectivity:
  - Installed several applications (full list to follow) on the two Citrix servers
  - Users could connect to the Citrix servers via direct IP (typing the IP address of the Citrix server into a browser)
  - Within Citrix, we narrowed down the list of allowable IP Addresses to those IPs being used by the Offshore team
  - Security was maintained through network IDs and passwords

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## Offshore – The Software

- Here's what was installed (across two servers):
  - Business Objects versions 5.1.6, 6.1b, and 6.5.1 – (Reporter, Designer, Supervisor)
  - Informatica version 6.2.2 (Designer, Repository Manager, Workflow Manager, Workflow Monitor)
  - Informatica version 5 (Designer, RepoMgr, SrvrMgr)
  - Brio versions 5.5.6, 6.6.1, and 8
  - Hummingbird Exceed
  - Keaterm
  - SQL Navigator
  - Access97 Application

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### Offshore – The Results

- Our Citrix deployment to our Offshore users was a resounding success:
  - Established network connectivity
  - Supported several projects
  - Allowed seamless Production Support, including a support for a major platform migration product (Windows to UNIX)
  - Supported upgrades for Oracle 8i to 9i, Informatica version 5 to 6, etc.

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### Offshore – Best Practices

- A few hitches:
  - Finding the best time for a weekly restart (with the time difference between the US and India, the servers were being used almost 24/7!!!)
  - Informatica works best with different versions of the product being on separate servers

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### Summary of Key Advantages

- Key advantages of Citrix:
  - **Centralized Deployment** - one server install vs. multiple client installs
  - **Large-scale Deployments** – uses the server processing architecture, which scales well for large deployments
  - **QA, Testing Environment** – allows a isolated environment for testing
  - **Remote User / Offshore Connectivity** – offers multiple applications for remote users

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**Questions?**



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**Thank You**



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