



BizViz – Running Applications in an Unattended Environment



APPLICATIONS NOTE

October 2013

Description: Guide to setting up ICONICS Applications to run in an unattended environment (running as services).

OS Requirement: Win XP/Server 2003/ Server 2008/Vista/Windows 7

General Requirement: Familiarity with how to create a user in windows, windows services, and DCOM.

Introduction

As the IT department gets more involved with plant floor operations, they sometimes require the servers that monitor plant operations sit in a locked server room. These servers must then be able to run all applications as required on system restart without console login.

One way of doing this is to run your ICONICS applications as Services. A key benefit of running programs as services is that services start up automatically without the need for a user to log-in. A good example of this is a web server; IIS on a Windows PC runs as a service where no one logs in to start it. This is especially useful in cases of a power failure or the situation mentioned above.

Below is a list of BizViz applications that you can run as an NT Service in version 9.X:

- BridgeWorX
- PortalWorX
- Productivity Analytics
- ReportWorX

Every service has the capability of being started automatically or manually. If you want, for example, the BridgeWorX to run as long as the PC is on, then you would make the BridgeWorX run as an automatic service.

This document will walk you through the general steps on how to set your ICONICS applications to run as a service.

Creating an Account to Run Services

First, you will need to create/use an administrative user to run the services. By having the same user running all ICONICS applications, it will minimize the amount of DCOM issue, which may render the system in a non-working state after changing the applications to run as a service. This will also make it simpler in maintaining your system as well as users.

1. On your Desktop, you can right-click on the “My Computer” icon and select Manage.
2. In the Computer Management Console, expand System Tools → Local Users and Groups → Users.
3. Right-click on Users and select New User.

4. Create a user called “IconicsApp” and give it a password. Set the expiration date of the password to be never.

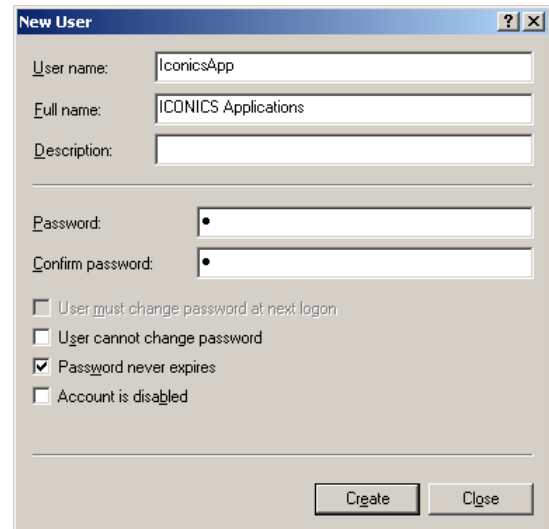


Figure 1 - New User Dialog

5. Click on the “Create” button and click on the “Close” button to exit the dialog.
6. In the Computer Management console, you should find the IconicsApp user. Double-click on the user to bring up its properties.
7. Select the “Members Of” tab and remove the “Users” group already listed for the user.
8. Click on the add button and add the “Administrators” Group. This will include administrative privilege for the IconicsApp user.

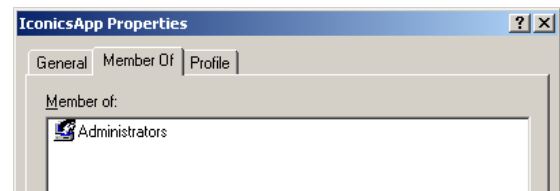


Figure 2 - IconicsApp User Properties Dialog

9. Click “OK” to save the changes and exit the Computer Management Console.

Setting Applications to Run as a Service

1. Run control panel → Administrative Tools → Services. We will look at BridgeWorX as an example.
2. Double click ICONICS BridgeWorX Service, or right click it and select its property.

3. On general tab, select automatic in Startup type box.

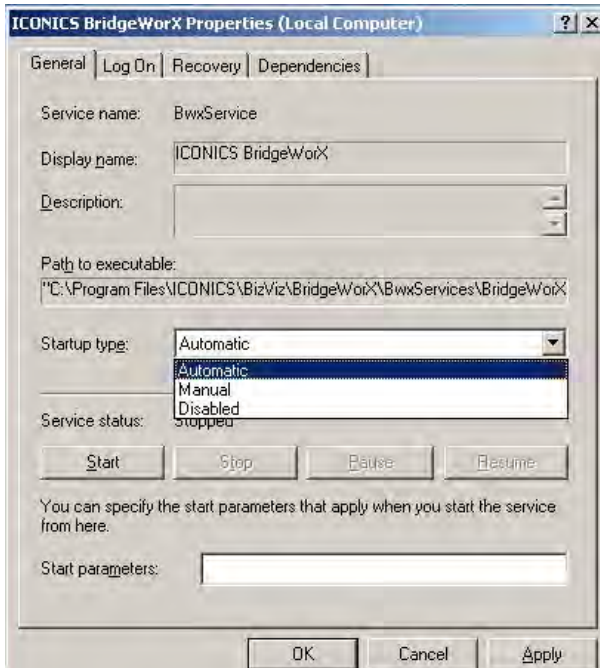


Figure 3 – BridgeWorX NT Service – General

4. Go to the Recovery tab and set the service to restart on failure.

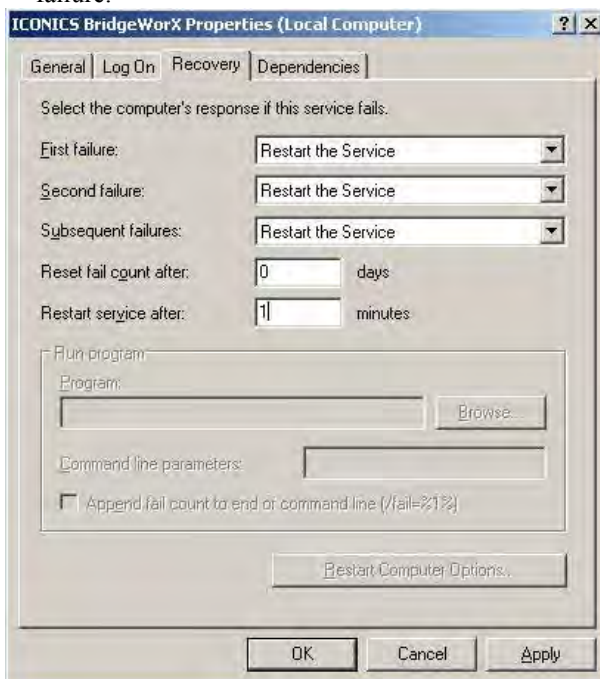


Figure 4 – BridgeWorX NT Service – Recovery

NT Services Security Context

If you plan to do a lot of cross-network services, we advise that you create a network account that has permission to access and launch all necessary components and services. For example, you may create a user called "ICONICSAdmin" on your domain that has access and launch rights to all of your OPC servers and logging programs. Then, in the service properties, specify the services to run under the context of this domain user.

1. On Log On tab, Click on the "Browse" button and select the user you would like to run the ICONICS applications. If you are using our example, the user would be IconicsApp.
2. Type in the password for the user and click on "Apply" to save the settings.
3. Repeat the above steps for all other ICONICS BizViz services in the Services Manager.



Figure 5 – BridgeWorX NT Service – Log On

Configuring DCOM

We published many applications notes in an effort to help you configure DCOM on different systems and different networks, if you are unfamiliar with DCOM, please read those applications notes first and setup your computer as recommended by those documents. We will not go through DCOM here as detailed as those documents have described. If you find yourself lost, please refer to the specific DCOM application note that applies to your environment.

1. Add the user you have created previously (IconicsApp) into the Default COM Security. If you are using a Domain User, you should add the Domain User. Depending on the version of Windows, you may also have to add the user in “Edit Limits”
2. Your finished configuration should look similar to Figure .

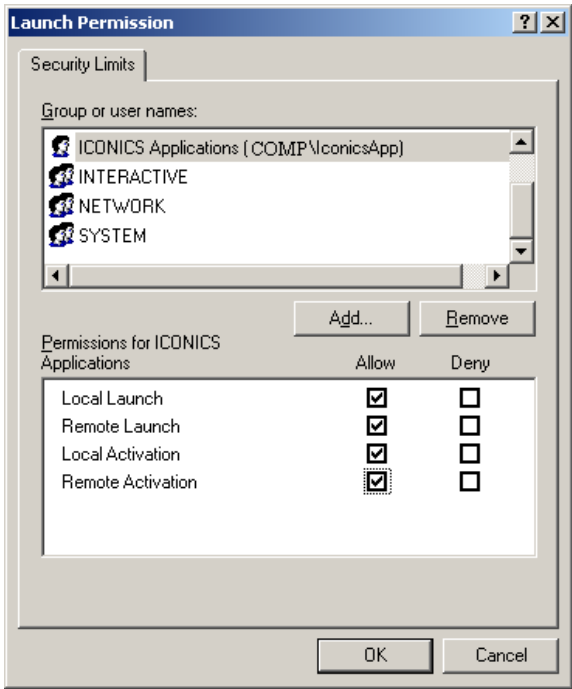


Figure 6 - Default Launch Limit Access

NOTE: You may not need all of the users listed here or in the DCOM application note. However, we advice that during development that you open your security to get the programs working. From this point, you can tighten security as needed for production.

3. Since we changed DCOM settings, we now must restart the computer.

4. Once the computer starts, check that all your services are running OK and things are working as normal. You are now ready to lock the system in a server room.