Installation Q&A

Supported environments

1. System Requirements

   WebAccess requires Windows 2000 or later, IE 5.5 or later (6.0 is a recommended minimum) and Internet Information Services (IIS) to be installed. Note that the home versions of Windows do not usually support IIS.
   To install WebAccess on your system please follow the guide corresponding to your OS.

2. Can WebAccess use the operating system users?

   Users cannot be universal and the parameters of WebAccess users are different from the parameters of Windows users. Therefore you need to create WebAccess users in the project node and they have no link with the operating system users.
   To manage users go to the project property page and select Users function.

WebAccess Features

1. Can multiple people work on the same project at the same time?

   The configuration interface works like a website and the clients are free so multiple people can be working on the project at the same time.
   You still need to work on different parts of the project as when you save a page you might overwrite someone else's work.

2. Can any database be used with WebAccess?

   WebAccess supports Access and SQL Server databases. The databases are built by WebAccess.

3. How secure is WebAccess?

   WebAccess uses multi-layered network security architecture. The firewall can be set to only allow access to the required TCP ports. The project node can act as a router or proxy between Internet and the SCADA nodes.
   WebAccess also has a "Remote access code" function to prevent the access of unauthorized people even if they have network access. And a multiple-level user system to manage access rights between different operators and managers.

4. What alarm reports types are supported by WebAccess?

When an alarm is generated WebAccess can play a sound, play an animation or take any kind of action in the display pages. It can also send an e-mail through a specified mailbox and an SMS using a modem.

5. Does WebAccess have a help function?

Yes. To access the help from the client please use the "help" link on the top right corner of the WebAccess configuration pages. To access the help from the nodes open the menu of the status bar icon and select the help section.

6. Can WebAccess support DDE?

WebAccess can serve as a DDE Server and DDE Client.

7. What communication types can WebAccess support?

WebAccess can communicate with automation equipment via Serial, TCP / IP, API, OPC, BACNET, LNS and other interfaces.

8. Can WebAccess support videos?

WebAccess provides a network video interface, allowing users to monitor real-time live images and sound from video devices on the network.

9. Can WebAccess support redundancy?

Yes, we have port redundancy and backup SCADA nodes.
The project node will download information to both main and backup SCADA nodes. Both nodes should have a valid hard key. At runtime the backup node will collect data from the main node and if the main node doesn't answer it will automatically take over the monitoring and control functions. When the main node restarts they will synchronize data and the main node will take back the control.
The Port redundancy allows a serial port to be used as backup for Modbus TCP devices.

Pricing

1. How is the cost calculated?

The project node and clients are free, only the SCADA nodes will be charged. Each SCADA node will be charged independently and must have its own license. The price depends on the number of points the node can use.

2. What are the differences between the standard and demo versions of WebAccess?

> The demo version is a full version of WebAccess but without a valid license key. It has all the functions of WebAccess but the SCADA node will automatically stop after two hours. Install a license key to remove this limitation.

3. Regarding point count, can WebAccess treat 16 digital points as 1 analog point?

> No. The digital points possess all the point functions such as alarms and therefore count as full points.

Troubleshooting

Startup

1. How to open WebAccess once it is installed?

> After installing the WebAccess client an icon will appear on your desktop. Use it to open an Internet Explorer window and type your IP address (or the local 127.0.0.1) to access the project.
> You can also open directly Internet Explorer and type your IP address in the address bar.

2. Why isn't my WebAccess page opening? Why can't I login?

> First check your Windows and Internet Explorer versions.
> Then check that IIS is installed and started.
> Check that the WebAccess Node folder and IIS root folder both have rights given to "Everyone".
> Check that WebAccess is started (You should see the WebAccess icon in the status bar).
> For more details or if this did not solve your problems please refer to the "Startup Troubleshooting Guide".

3. Element list incomplete after installing Oracle 11g as data source

> The settings were affected by the installation of Oracle 11g and the WebAccess/Node folder cannot be found anymore. To solve this:
> a) Open "Control Panel ->" System "
> b) In the display the "System Properties" dialog box, select "Advanced" tab
> c) Press "Environment Variables" button
> d) In the "System Variables" select "Path" variable
> e) Click "Edit" button and in the "variable value" field ";C:\WebAccess\Node" at the end. That is the Node directory. If you used another directory please set your Node directory instead.
> f) Restart your computer.

Error Messages

1. "Incorrect monitoring node type" error

   The BWSERVER.ini file may not exist on the SCADA node or be incorrect; the file has a [nodetype] section, which specifies the type of the node on the machine:
   0 - Project and SCADA node
   1 - Project Node
   2 - SCADA Node

2. "Please configure the project node" error

   Check that the project node and SCADA node IP are correct.

3. "Project node data is not available, configure project node first" error

   The client version may be incorrect. Please uninstall the client and re-download it from the project node you are trying to view.

4. "WebAccess Client Plug-in could not be Started" error

   This error means the client add-on has been disabled in Internet Explorer. Open Tools -> Manage Add-Ons -> Settings -> Enable or Disable Add-Ons. Make sure that WEBDACT and WEBVACT are enabled. Then restart Internet Explorer.

5. My iPhone says my server is not a valid WebAccess server

   To use the iPhone client it is recommended to have a WebAccess version newer than 2011/05/30. If your version is too old please update it. Otherwise make sure WebAccess was installed after IIS as it needs to create virtual folder in IIS. Lastly if you are on Windows XP or prior make sure .NET 3.5 is installed on the computer.

CE

1. CE Edition allows download but no not monitoring

   In the CE system Webaccess \ Node directory should have three *. mnu and three *. lng files, these files may be missing. If some of those files are missing copy them from another CE computer running WebAccess.

2. CE Edition download incomplete or project directory not created

   In the project settings set the IP of the project to the actual IP not 127.0.0.1. Then check that the ports 4592 and 14592 are opened in the firewalls

   .

Other

1. The database is too big. How to solve this issue?

    WebAccess has a database maintenance function to extract the record from the database after a period of time and keep the database in a controllable size.

2. Database maintenance function does not work

    The maintenance function will run when clock goes from 23:59:59 to 00:00:00 so make sure the node is running at that time.

3. ADAM5k TCP driver cannot read values when installed on UNO with ProConOS

    In this configuration the Modbus addresses are on the UNO not on the ADAM5000 device so the address in WebAccess should be the address of the UNO.

4. Reading database with bwdb driver cannot get value

    The database will parse the SQL command you send and extract any SQL keyword such as "table", "value", "time", "user"… and operators like "+" and "-". It is better to avoid using those keywords and operators in your table and column names as they might cause errors during the SQL parsing. With SQL Express you can add "[]" around a column or table name to avoid it being parsed but this workaround does not work with Oracle systems.

5. MS DTC problem

    If the MS DTC service fails to start, you may need to reinstall the service. Follow the procedure described below:
    1. In the "Administrative Tools", open the "service", and then stop all services
    2. Change the "Startup Type" of all services not listed below to "Manual"
       Note: It is recommended that you write down the changes to the service so that you can correct in step 7 to restore these values
        a) Alerter
        b) COM + Event System
        c) Computer Browser
        d) Distributed Link Tracking Client
        e) DNS Client
        f) Event Log
        g) IPSEC Services
        h) Logical Disk Manager
        i) Messenger
        j) Net Logon
        k) NT LM Security Support Provider
        l) Network Connections
        m) Plug and Play

n) Remote Procedure Call (RPC)
o) Remote Procedure Call (RPC) Locator
p) Removable Storage
q) Security Accounts Manager
r) Server
s) System Event Notification
t) Task Scheduler
u) TCP / IP NetBIOS Helper
v) Windows Management Instrumentation
w) Windows Management Instrumentation Driver Extensions
x) Windows Time
y) Workstation

3. Close the "Services", then restart the computer
4. Execute the command:% WINDIR% \ System32 \ msdtc.exe-uninstall
5. Start Registry Editor, and delete the following registry keys:
   HKEY_CLASSES_ROOT \ CID
   HKEY_LOCAL_MACHINE \ SYSTEM \ CurrentControlSet \ Services \ MSDTC
   HKEY_LOCAL_MACHINE \ SYSTEM \ ControlSet001 \ Services \ MSDTC\
   HKEY_LOCAL_MACHINE \ SYSTEM \ ControlSet002 \ Services \ MSDTC
   HKEY_LOCAL_MACHINE \ Software \ Microsoft \ MSDTC
6. Execute the command:% WINDIR% \ System32 \ msdtc.exe-install
7. Wait for disk activity to stop, then restore the "Startup Type" values of all the services modified at step 2.
8. In the registry, create the following registry key:
   HKEY_LOCAL_MACHINE \ SOFTWARE \ Microsoft \ MSDTC \ XADLL
9. Execute the command: regsvr32 mtxoci.dll
10. Restart your computer
11. Execute the command:% WINDIR% \ System32 \ msdtc.exe-resetlog

What is this function?

1. How to use the "Import SCADA node" function?

   The Import SCADA node function is made to transfer easily a SCADA node from one computer to another.
   To use it enter the project node property page and select the Import SCADA node function. Then type the IP and eventually ports and remote access code of the project node containing the SCADA node to import. If there is a name conflict you can rename the node while importing it.

2. What are blocks and how to use them?

A block is a set of points corresponding to a combination of parameters in a PLC (or another device) usually saved in a single register. The block will group these parameters under a single name to be monitored more conveniently. Parameters that can be set into a block are parameter with a constant address offset, typically the different parameters of a PID, Timer or other blocks inside a PLC.

3. How to create and use local points?

Local points are points that exist only in the browser while viewing the page. If two viewing instances are created they will have different values for their local points. Local point values do not have alarms or other I/O point features and their values are lost when the page is closed.
You can create local points and assign them to a page in draw in the page property window. The local point settings are saved in a *.ltg file.

4. What is the difference between [], "" and {} in TCL?

   a) [] is used to encapsulate a nested command. The nested command will be executed first and its result will be used as a parameter.
   b) "" is used to encapsulate a single parameter (a parameter that is not encapsulated cannot contain spaces) that may contain $ and [] that should be parsed.
   c) {} is used to encapsulate a single parameter where $ and [] elements should NOT be parsed.
   d) {} will execute faster than "".

How to …?

System

1. How to update my WebAccess?

To update WebAccess simply install the new version. All the data will be kept. Please stop the node before updating and if you use a USB hard key please unplug it during the update.

2. How to install the license key?

To install or change a license key please follow the procedure below:
   a) Open the Task Manager and stop the "webvrpcs.exe" and "webvkeep.exe" processes.
   b) Copy the bwkserv.exe file you obtained to your WebAccess\Node folder (Overwrite the previous file which corresponds to the demo key)

      c) If you are using a Hard Key please insert it in a USB port of the computer. If you are using a Soft Key make sure that the network port corresponding to the MAC address you gave is connected to a network.

      d) Restart WebAccess (execute WebAccess\Node\webvrpcs.exe).

      e)

3. How to access your project with the client? Where to download the client?

To access the project node you need the WebAccess client. Then enter the IP address of the project node in the client page or directly in Internet Explorer. You will also need a valid username and password to access the configuration or monitoring pages.

If you do not have the client open Internet Explorer and enter the project node IP address. The client should be downloaded automatically. If it is not downloaded you have a download link on the main page of the project node.

Configuration

1. How to set TCP ports for cross-network installations?

WebAccess uses three ports for TCP connections and while working in cross-network system all three ports must be opened through firewalls and routers and set properly in the port mapping files.

The three ports are: port 80 for ASP page access and the two ports set for TCP connections during the installation of WebAccess. If the default values were left during the installation (which means leaving 0) the two ports are 4592 and 14592.

2. How to play a sound when an alarm occurs?

The sound file you want to play should be saved under WebAccess\Node\config\<your_project>_<your_node>\

In the point configuration page set the file name in the "Media File" section of the alarm that should trigger the sound.

HMI

1. How to get a Random number in TCL?

The RAND () function in TCL does not give a good random value.
You can use following method instead:
SETVAL RandVal = [expr [GETVAL% ANUMRAND] / 10000.0]

2. How to change the Initial value of a point from the node?

In the SCADA node property page set the "Online Change Tag Field To DataBase" property to "Yes"

3. How to make the difference between View and ViewDAQ?

> The local value %ADAQTYPE can give you the type of client:
> 0: ViewDAQ
> 1: View Client
> 2: Global Script
> 3: User Program

4. How to disable the mouse right-click menu?

> Open the bwclient.ini file under WebAccess\Node. Then add the following two lines to the file and save it:
> [popupmenu]
> Disabled=1

5. How to hide the toolbar in View?

> Open the file C:\Inetpub\wwwroot\broadweb\system\bwviewpg.asp with a text editor. (C:\Intepub\wwwroot is your IIS root folder) Around line at line 128 you will see:
> var tool_default = 1;
> var stat_default = 1;
> var capt_default = 1;
> Change tool_default to 0 to hide the toolbar, stat_default to 0 to hide the status bar and capt_default to 0 to hide the caption bar.

6. How to display arrays?

> When you define a point as an array the <Point_Name> variable will return the first element of the array. To reach the other elements you should use <Point_Name>(<array_index>)

7. How to embed Web pages in WebAccess?

> To embed web pages in your WebAccess page you need to create a Video Display element. The page will then appear in that element. For web pages set the link of the Video Display as "htm:http://<web_site_address>".

8. How to make a close WebAccess button?

> To close all WebAccess windows at the same time use the macro command "<CLOSEALL>". This command can be set in a button macro.

9. How to make pages for 16:9 screens?

> WebAccess uses vector based graphics which means the page will be stretched to fit the target screen. If your target screen is in 16:9 ratio and you use the default drawing ratio all your pages will be stretched.

To solve this issue you need to save the pages with a 16:9 ratio. To do this easily you can draw a rectangle with the proper ratio and make your page inside that rectangle. Before saving the page select the rectangle and all the objects inside it and when you save select "Select Objects". The page will have the same ratio as the rectangle and not appear stretched on your target screen.

10. How to monitor connection between nodes?

To monitor the status of other nodes or ports you have to use System Points. In WebAccess configuration pages select "System Point" function and add a new point. To monitor the status of another SCADA node choose "NodeSTS" type and select the node you want to monitor.

11. How to pop a window from Global Script?

To pop a window from a Global Script you need to send the popup command to a window. To do it please use the following command:
SENDCMD main:untitled=<DSPPOPUPDEP>@<your_dsp>.dsp
"main" is the default dsp name and "untitled" is the default window name. If you change those values please modify the command properly.

12. How to change page when a user logs in?

To change the page depending on the user you can use the "%TUSERNAME" variable to check the current user name. Then use the "GOTODAQ GRAPH" command to switch the window to another page:
if {[GETVAL %TUSERNAME]=="admin"} then {
        GOTODAQ GRAPH=second.bgr
}