

PortalWorX™ Microsoft .net

Real-time Collaboration and Visualization Dashboards

Visualize Any Real-Time and Corporate Data Source

Retrieve data from any OPC real-time database or historical data source.
Combine plant with business information

Based on Microsoft® .NET Technology

Designed from the ground up to take maximum advantage of Microsoft .NET,
Web services and Microsoft SharePoint™ technology

Easily Create Firewall and IT Friendly Dashboards

Create visualization dashboards and real-time portals, which provide
information and optimization of key performance indicators

Enterprise-Wide Single Sign-on With Security

Configured portal can handle all logins in a secure and safe manner.
No need to have separate user names and passwords for different systems

Extensive Library of .NET Web Parts

Rich library of Web parts from ICONICS and Microsoft. Includes
Alarm, Visualization, Reporting, Data Bridging, and much more

Data-Mine SQL, Oracle, ERP, CRM or Any Data Source

Data-mine any corporate database including Microsoft SQL Server®,
Oracle®, SAP®, plant historians and more

Fast Web-based Drag-and-Drop Configuration

Web parts can be moved to a new location, with a simple drag-and-drop, and
can be closed or minimized to allow full control of the working area

Simple-To-Use Dashboard Layout Editor

Create custom portal layouts to meet any application need

Integrated ICONICS GENESIS32 and BizViz Web Parts

Comes complete with .NET Web parts for bridging and reporting, and ties directly
to GENESIS32™ and BizViz™

Create Personalized Views

Maintenance, Engineering, Quality Control, and the Corporate Office
can view information in a user-specific format

Collaboration of Information and Projects

Design and build collaborative information-sharing sites.
Store documents, spreadsheets, and CAD drawings and add online forums

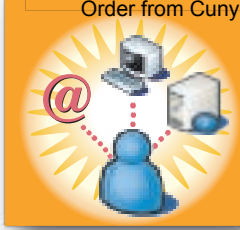


*"Visualization dashboard
for today's automation needs!"*



Visualize Your Enterprise!™





PortalWorX Microsoft.net

Visualization Dashboards for Real-time, Business & Manufacturing Data

PortalWorX™ is based on Microsoft's newest SharePoint Server technology. It allows users to easily create and manage custom manufacturing and business portals and visualization dashboards that provide single sign-on and collaboration for optimization of key performance indicators (KPI). PortalWorX provides everything you need to create a portal for your real-time, historical plant and business information. PortalWorX requires virtually no administration, is easy to configure, and delivers data to those who need it, when they need it. Enables the bridging of virtually any industrial or corporate database. Integrate information from different data sources, including Microsoft® SQL Server, Oracle®, SAP®, OPC® HDA (Historical Data Access), OPC AE (Alarm and Events), and OPC real-time information.

ICONICS Markets Served

ICONICS has more than 150,000 systems running in over 20,000 plants worldwide. The following industries are benefiting from ICONICS solutions:

- Manufacturing Intelligence
- Business Intelligence
- Automotive
- Building Management
- Food and Beverage
- Oil, Gas and Petrochemical
- Machine Builders
- Pharmaceutical and Biotech
- Security
- Water and Wastewater
- Utilities
- Financial
- And many more...

For further information call

1-508-543-8600

or visit our website

www.iconics.com



Visualize Your Enterprise!™

The Visualization Solution for Manufacturing Intelligence

Looking for a collaboration platform to easily create and manage custom manufacturing and business intelligence portals and visualization dashboards that provide single sign-on and collaboration for optimization? Built on the standard Microsoft SharePoint Server, PortalWorX provides everything you need to create a manufacturing or business portal for your real-time, historical plant and business information for measuring key performance indicators (KPIs). PortalWorX requires virtually no administration, is easy to configure, and delivers data anytime, anywhere to those who need it.

PortalWorX Web Parts Catalog

In addition to the numerous standard Web parts from Microsoft SharePoint Server, PortalWorX comes with several ready-to-use custom Web parts. There are three different types of ICONICS Web parts. Some are listed below:

- Visualization:** • Display (Read and Write) • Alarm viewing and acknowledgement • Trending • Web-based HMI configuration • ActiveX library including Gauges, Sliders, & more...
- Data Access & Operations:** • File Explorer (browse documents) • Single Sign-On configuration • Enhanced Calendar • Tag Explorer (Database & Data Source Bridging)
- Reporting:** • Viewing and Navigation • Administration Console • Execution Console

Simple Drag-and-Drop Configuration

Web parts can be moved to a new location with a simple drag-and-drop and can be closed or minimized to allow full control of the working area. Moreover, Web parts are fully customizable and they retain properties for each user. For security concerns, administrators can also restrict customization level.

Create Personalized Views

PortalWorX will support different types of customization, including content, language and appearance. Appearance customization involves applying a theme, similar to Microsoft FrontPage. New themes can be created and applied as well. Language customization and content customization are also supported. The content and layout can be customized for individual users to present targeted information on appropriate topics. This delivers relevant data to those who need it, helping users make quicker decisions. Entire configurations can be saved and reused by individuals and teams across an organization. PortalWorX allows complete control over the user customization.

Data-Mine SQL, Oracle, SAP or Any Enterprise Information

Powerful Microsoft .NET technology allows the data mining of virtually any corporate database. PortalWorX can integrate information from different data sources. Data sources such as Microsoft SQL Server, Microsoft Access, ODBC, OLEDB, MSDE, Oracle, AspenTech, OSI PI, OPC HDA (Historical Data Access), OPC AE (Alarm and Events) and OPC real-time information can all be accessed. PortalWorX uses Web services technology to data-mine other Web services over the Internet or intranets.

Create Firewall and IT Friendly Web Dashboards and Portals

PortalWorX allows users to have customizable views of their manufacturing and enterprise information, eliminating the need to build and maintain different visualization applications. Being able to reuse Web parts and drop in off-the-shelf Web parts saves on development and deployment time.

Powerful Microsoft.NET Technology

PortalWorX is designed from the ground up based on Microsoft .NET technologies and Microsoft SharePoint Services, is written in Microsoft C# (C-Sharp) and leverages the latest Web services technology. Connecting to source and target systems and files is fast, efficient and easy to configure. Taking maximum advantage of Microsoft's most powerful technologies, ICONICS brings you the most advanced collaboration and information-sharing tools available today.

Build Your Own Web Parts

Users can also build their own Web parts to add additional features and functionality, integrate existing applications and enhance user experience. Using Microsoft technologies, one can build Web parts to provide data access, Web services, and other applications and content for the manufacturing portals. Once these Web parts are built and added to the site library, they can be reused.

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Visualization Dashboards for Real-time, Business & Manufacturing Data

Summary

Looking for a collaboration platform to easily create and manage custom manufacturing and business intelligence portals and visualization dashboards that provide single sign-on and collaboration for optimization of key performance indicators (KPIs)? Look no further than **PortalWorX™**. Built on the standard Microsoft® SharePoint™ Server and .NET technologies, PortalWorX provides everything you need to create a manufacturing or business portal for your real-time, historical plant and business information. PortalWorX requires virtually no administration, is easy to configure, and delivers data to those who need it, when they need it.

Main Features & Benefits

- ✓ Customizable dashboard built with "Web Part" blocks designed for manufacturing.
- ✓ Provides single sign-on services for all applications.
- ✓ Fully distributed architecture using Web services for scalability.
- ✓ Improves communication and collaboration between team members.
- ✓ Create personalized views per user.
- ✓ Simple drag-and-drop configuration.



The Ideal Tool for Manufacturing Intelligence

PortalWorX allows users to design, develop and deploy custom manufacturing and business intelligence portals and visualization dashboards. Users can design and build collaborative information sharing sites and content from the Web parts infrastructure, which could include real-time data from the plant floor in a graphical format, files on the server, data from the corporate ERP system, etc.

PortalWorX has built in Web services that will enhance user experience: from single sign-on to HMI visualization via the Web. PortalWorX has a friendly and secure Web interface to allow full configuration over the Web.

Award-Winning Microsoft SharePoint Services

PortalWorX is built using Microsoft SharePoint Server technologies (ASP.NET and Web services). This foundation provides an excellent platform to add manufacturing-focused Web parts to build a completely customizable and secure portal.

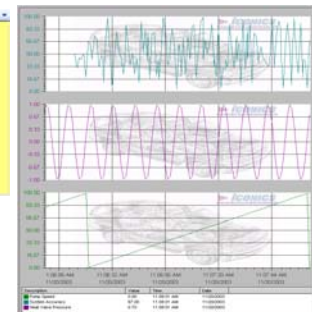
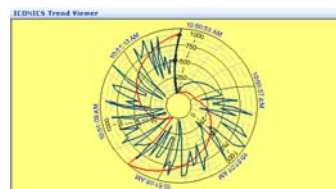


ICONICS Web Parts Catalog

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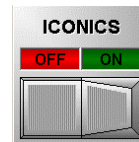
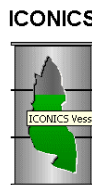
Visualization

- HMI display (read and write)
- Alarm viewing and acknowledgement
- Trending
- Web-based HMI configuration
- ActiveX library including gauges, sliders, and more



Reporting

- Viewing and navigation
- Execution console



ES Reports - Production Reports

User	Report Name	Description	Execution Time
MARCO-2003 Vmarco	Line 1 Daily Report New	Details on productivity, parts, downtime, jobs completed for Line 1.	11/20/2003 5:55:32 PM
MARCO-2003 Vmarco	Shift Quality Report New	Quality Data Collected from system for the current operating shift.	11/20/2003 5:55:16 PM
MARCO-2003 Vmarco	Orders for Day New	Summation of all product orders completed on the assembly line.	11/20/2003 5:55:10 PM
MARCO-2003 Vmarco	Shift Quality Report	Quality Data Collected from system for the current operating shift.	11/19/2003 5:55:03 PM
MARCO-2003 Vmarco	Orders for Day	Summation of all product orders completed on the assembly line.	11/19/2003 5:54:16 PM

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Data Access & Operations

- File explorer for browsing document libraries
- Database and data source bridging
- Single sign-on configuration
- Enhanced calendar
- Tag explorer for visualizing various KPI's (Key Performance Indicators)

ICONICS Alarm Viewer

Time /Date	Tag	Value	Priority	Quality	Description
10:57:55 AM 11/21/2003	+/Temperature+	40	500	Good Non-Specific	+/Awx'Load'Temp'Normal+/
10:57:54 AM 11/21/2003	+/Temperature+		500	Good - Non-Specific	+/Awx'RateOfChange'Temp'Critical+/
10:57:54 AM 11/21/2003	+/Pressure+/		500	Good - Non-Specific	+/Awx'Deviation'Pres'HiHi+/
10:57:55 AM 11/21/2003	+/Pressure+/	18	500	Good Non-Specific	+/Awx'Load'Pres'Normal+/



Build Your Own Web Parts

Users can also build their own Web parts to add additional features and functionality, integrate existing applications and enhance user experience. Using Microsoft technologies, users can build Web parts to provide data access, Web services, and other applications and content for the manufacturing portals. Once these Web parts are built, adding them to the site library can reuse the parts. Users also have programmatic access to the single sign-on Web service and other services that PortalWorX installs by default.

Powerful Microsoft.NET Technology

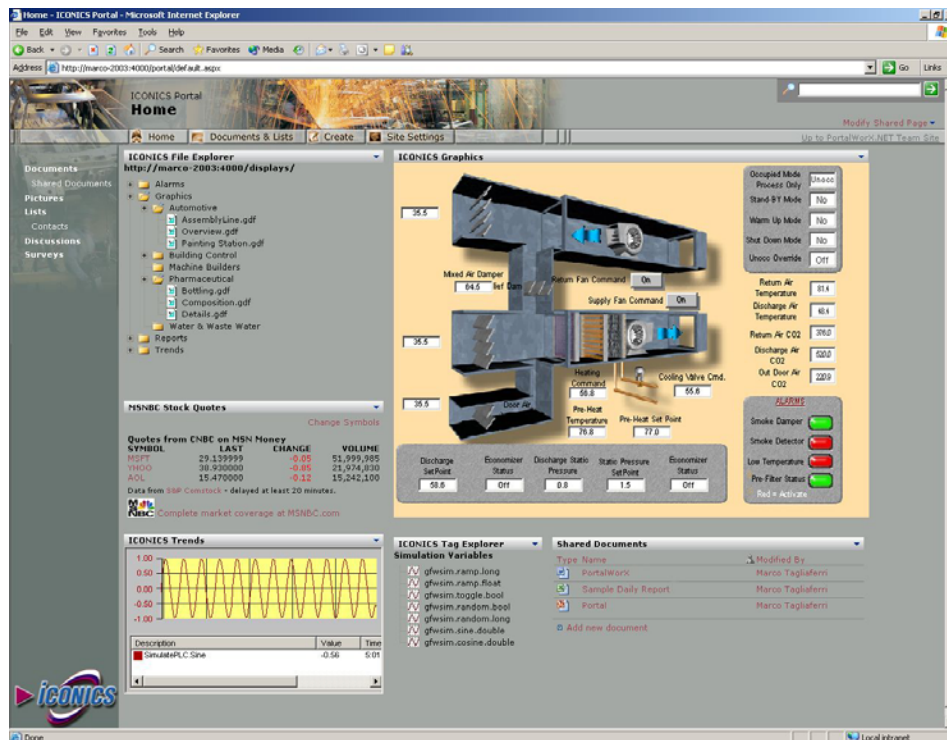


PortalWorX, designed from the ground up based on Microsoft .NET technologies and Microsoft SharePoint Services, is written in Microsoft C# (C-Sharp) and leverages the latest Web services technology. Connecting to source and target systems and files is fast, efficient and easy to configure. Taking maximum advantage of Microsoft's most powerful technologies, ICONICS brings you the most advanced collaboration and information-sharing tools available today.

Integrate Information

Powerful Microsoft .NET technology allows the data-mining of virtually any corporate database. **PortalWorX** can integrate information from different data sources. Data sources such as Microsoft SQL Server, Microsoft Access, ODBC, OLEDB, MSDE, Oracle®, AspenTech, OSI PI, OPC Historical Data Access (HDA), OPC Alarm and Events (AE) and OPC real-time information can all be accessed. PortalWorX uses Web services technology to data-mine other Web services over the Internet or intranets.

PortalWorX allows you to integrate information coming from a variety of applications. Starting with graphics, trends, and alarms coming from ICONICS applications, users can add in reports supplied by reporting Web parts and access plant and enterprise databases through data-bridging. Moreover, users have full integration with their enterprise and plant applications in a single view.



Share All Types of Information

Users can share and collaborate with all types of information, including events, calendars, Web links, discussions, chats, announcements, real-time data, plant historical and business information, and much more. By creating smart places using SharePoint Services, users can collaborate on projects and share information and files.

Custom Views for Users & Drag-and-Drop Configuration

The content and layout can be customized for individual users to present targeted information on appropriate topics. This delivers relevant data to those who need it, helping the user make quicker decisions. Entire configurations can be saved and reused by individuals and teams across an organization. **PortalWorX** allows complete control over the user customization. Users can build their own page by placing the desired Web parts on the screen. Web parts can be moved to a new location with a simple drag-and-drop, and can be closed or minimized to allow full control of the working area. Moreover, Web parts are fully customizable, and they retain properties for each user. For security concerns, administrators can also restrict the customization level.

Site Customization

PortalWorX supports different types of customization, including content, language and appearance. Appearance customization involves applying a theme, similar to Microsoft FrontPage. New themes can be created and applied as well. Language customization and content customization are also supported.



No Custom Programming Required

PortalWorX provides a complete solution for creating and managing custom manufacturing and business intelligence portals and visualization dashboards. It requires no custom programming, as all content is built with a combination of Web parts, which include ICONICS' specific Web parts as well as standard Web parts supplied by Microsoft.

Scalable Architecture

PortalWorX is completely based on Microsoft .NET and Microsoft SharePoint Server technologies, and is designed to scale from the simplest to the most demanding application. This architecture allows for scaling from a single computer up to Web farms, and is designed to run in distributed environments with multiple servers and different databases.

Security and Single Sign-On

The built in single sign-on functionality with PortalWorX provides storage and retrieval services for user credentials. All Web parts used within PortalWorX can leverage single sign-on to perform automatic logins to multiple applications. Credentials are stored with 256 Advanced Encryption Standard (AES) encryption. All sign-on communication to and from Web parts is encrypted for added security.

Cost Savings and Productivity

PortalWorX allows users to have customizable views of their manufacturing and enterprise information. Thus, there is no need to build and maintain different visualization applications. Being able to reuse Web parts and drop in off-the-shelf Web parts saves on development and deployment.

PortalWorX – Client Side Requirements

- Microsoft Windows 98, Windows 98 SE, Windows Me, Windows 2000 Professional, Windows XP Home, Windows XP Professional
- Microsoft Internet Explorer (IE) 6.0 or later

PortalWorX – Server Side Requirements

- Microsoft Windows Server 2003
- MSDE 2000 or Microsoft SQL Server 2000
- Microsoft Internet Explorer 6.0
- Microsoft Office SharePoint Service 2.0 or SharePoint Portal Server 2003
- Internet Information Services (IIS) 5.0 or later
- Pentium 4 2 .0 GHz or greater
- 512 MB of RAM

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