

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, CAD drawings, data from the corporate ERP system, etc.

PortalWorX has built in various 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

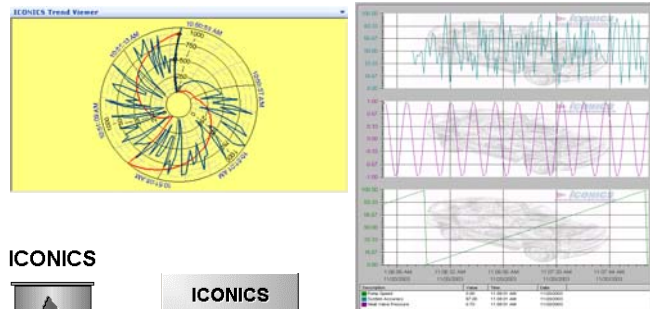
PortalWorX is built using Microsoft SharePoint Server technologies (ASP.NET and Web services). This foundation provides an excellent platform to add manufacturing-focused Web parts to build a completely customizable and secure portal.



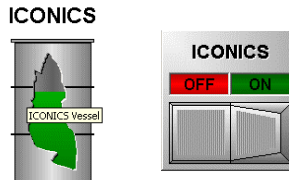
ICONICS Web Parts Catalog

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, and some are listed below:

- ❑ **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
 - Administration console
 - Execution console



- ❑ **Data Access & Operations**
 - File explorer for browsing document libraries
 - Database and data source bridging
 - Single sign-on configuration
 - Enhanced calendar

User	Report Name	Description	Execution Time
MARCO-2003 Ymarco	Line 1 Daily Report New	Details on productivity, parts, downtime, jobs completed for Line 1.	11/20/2003 5:55:32 PM
MARCO-2003 Ymarco	Shift Quality Report New	Quality Data Collected from system for the current operating shift.	11/20/2003 5:55:16 PM
MARCO-2003 Ymarco	Orders for Day New	Summation of all product orders completed on the assembly line.	11/20/2003 5:55:10 PM
MARCO-2003 Ymarco	Shift Quality Report	Quality Data Collected from system for the current operating shift.	11/19/2003 5:55:03 PM
MARCO-2003 Ymarco	Orders for Day	Summation of all product orders completed on the assembly line.	11/19/2003 5:54:58 PM

Time / Date	Tag	Value	Priority	Quality	Description
10:57:55 AM 11/21/2003	/+Temperature+/ +I	48	500	Good Non-Specific	/+Awx'Leak'Temp'Normal+/ Non-Specific
10:57:54 AM 11/21/2003	/+Temperature+/ +I		500	Good - Non-Specific	/+Awx'RateOfChange'Temp'Critical+/ Non-Specific
10:57:54 AM 11/21/2003	/+Pressure+/ +I		500	Good - Non-Specific	/+Awx'Deviation'Pres'HiHi+/ Non-Specific
10:57:46 AM 11/21/2003	/+Pressure+/ +I	76	500	Good Non-Specific	/+Awx'Leak'Pres'Normal+/ Non-Specific



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

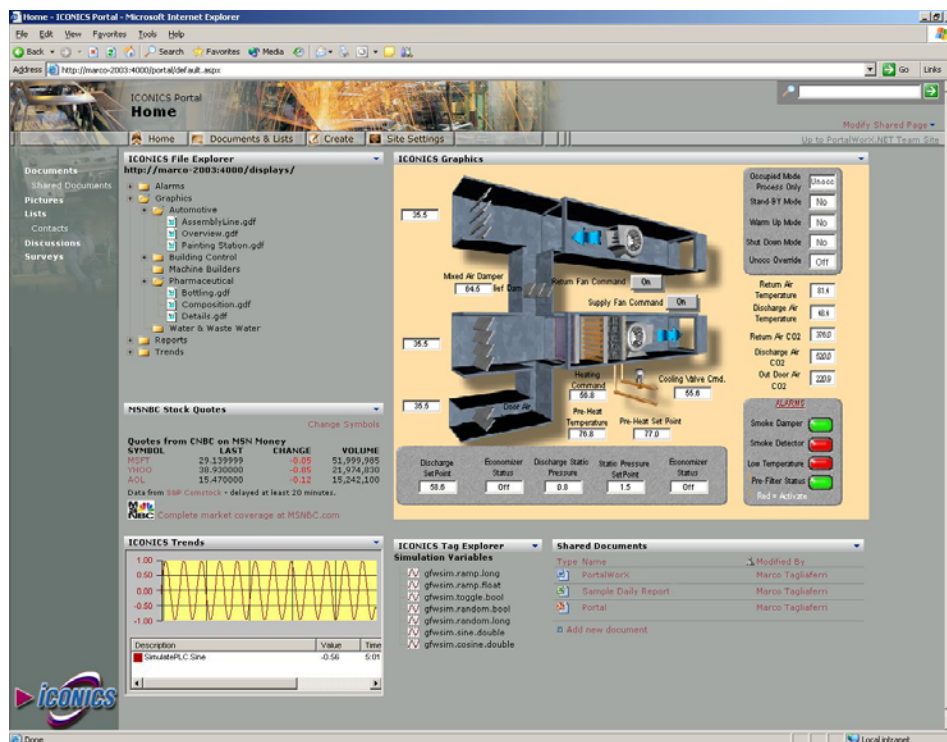


PortalWorX, designed from the ground up based on Microsoft .NET technologies and Microsoft SharePoint Services, is written in Microsoft C# (C-Sharp) and leverages the latest Web services technology. Connecting to source and target systems and files is fast, efficient and easy to configure. Taking maximum 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 link, discussion, 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 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. 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.

Component Requirements

To set up and use PortalWorX, you need Microsoft SharePoint Services and Microsoft Windows® Server™ 2003. In addition, you must have the following:

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

- ❑ One of the following operating systems:
 - Windows Server 2003, Standard Edition
 - Windows Server 2003, Enterprise Edition
 - Windows Server 2003, Datacenter Edition
 - Windows Server 2003, Web Edition (requires full version of Microsoft SQL Server™)
- ❑ .NET common runtime
- ❑ Microsoft SQL Server 2000 or MSDE 2000 with latest service packs
- ❑ WebHMI™ 8.0 (although an installation of GENESIS32™ is required for licensing and security)
- ❑ Pentium 4 CPU - 2.0 GHz or greater
- ❑ 1 GB RAM
- ❑ A Web application server with the following components:
 - Microsoft ASP.NET
 - Internet Information Services (IIS) 6.0 with the following components:
 - Common files
 - Simple Mail Transfer Protocol (SMTP) service
 - World Wide Web service



PortalWorX – Server Database Requirements

- One of the following versions of Microsoft SQL Server:
 - SQL Server 2000, with the latest service pack
 - SQL Server 2000 Enterprise Edition, with the latest service pack
 - SQL Server 2000 Desktop Engine (MSDE 2000), with the latest service pack
 - SQL Server 2000 Desktop Engine (Windows) (WMSDE)

PortalWorX – Network Requirements

- Multiple server configurations must be members of a Microsoft Windows NT® 4.0, Windows 2000, or Windows Server 2003 domain.

Contact Information

ICONICS, Inc.
100 Foxborough Blvd.
Foxborough, MA 02035
Telephone: 508-543-8600
Fax: 508-543-1503
E-mail info@iconics.com
www.iconics.com

