



IBM Software Group

Bowstreet Portlet Factory 5.9

WebSphere Portal Server v5.1

Lotus software



ON DEMAND BUSINESS™

IBM Proof of Technology

IBM Product Introduction + Exploration

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Session Objectives

- After completing this session, you should be able to:
 - ▶ Identify Bowstreet Portlet Factory
 - ▶ Understand Features and Capabilities of the Bowstreet Portlet Factory Products
 - ▶ Identify if Bowstreet Portlet Factory can be an asset in your organization

Agenda

- Bowstreet Portlet Factory Overview
- Benefits of Bowstreet Portlet Factory
- Bowstreet Portlet Factory Concepts
- What's in BPF v5.9
 - New Model creation wizards
 - New Builders
 - Siebel Builders
 - Localization Builder
 - Category View Builder
 - SAP Business Warehouse Builder
 - Improved visual page flows
 - Enhanced Builder Skeleton
 - Additional support for platforms/standards
- Demo

Custom WebSphere Portlets Made Easy

Bowstreet™ Portlet Factory for WebSphere® is a dedicated Portlet creation environment for WebSphere Portal that simplifies & accelerates the development, deployment, maintenance and reuse of custom portlets.



✓ **Automation**

✓ **Change**

✓ **Reuse**

Bowstreet Portlet Factory dramatically reduces the complexity of J2EE portlet development for WebSphere Portal

BPF: Features & Benefits

Delivering Rapid Application Development & Change for WebSphere Portlets

FEATURE	BENEFITS
Builders™ Wizard-like reusable components automatically generate error-free J2EE code	<ul style="list-style-type: none"> Abstract J2EE complexity Enable rapid change/iteration during development FAST the 1st time – build portlets up to 12x faster
Profiles Configurable <i>Builder</i> -input variables	<ul style="list-style-type: none"> Rapid portlet variations for new portal requirements Eliminate complex conditional logic & portlet code duplication Build portlets even FASTER the 2nd time!
Regeneration On-Demand generation of portlet code	<ul style="list-style-type: none"> Empower non-technical users to create portlets Propagate changes to multiple portlets from one code base
Integration Direct enterprise application, database, business objects & Web Service integration via <i>Builders</i>	<ul style="list-style-type: none"> Leverage existing IT assets and investments for composite portlets, such as Domino, SAP, PeopleSoft, Siebel, EJBs, etc.
Ready for WebSphere Plug-in to <i>WebSphere Studio Application Developer</i> and <i>Rational Application Developer 6</i>	<ul style="list-style-type: none"> Extends WebSphere and Rational development environments to more users Consistent, familiar, environment for all developers
WebSphere Portal Integration Deeply integrated with <i>WebSphere Portal</i> and its robust portal API and portal administration	<ul style="list-style-type: none"> Portlets immediately ready for deployment & <i>Profiles</i> exposed via WebSphere Portal's standard portal admin & config Leverages portal's rich Click-to-Action, portlet messaging, etc. capabilities; while shielding complexity

Benefits for the IBM Enterprise

■ “Ready for WebSphere Portal”

- ▶ Deep Portal API Integration
- ▶ NO changes required to portal; portlets developed immediately available for deployment
- ▶ Portlet Factory carries “Ready for IBM WebSphere Portal Software” validation



■ “Ready for IBM Rational Developer and WebSphere Studio”

- ▶ Seamless plug-in to WebSphere Studio Application Developer, IBM Rational Developer 6, and Eclipse; extends development environment to non-J2EE developers
- ▶ Portlet Factory is the only “Ready for IBM WebSphere Studio Software” certified portlet development plug-in



■ “Ready for Workplace”

- ▶ Bowstreet Portlet Factory is certified for “IBM Workplace Software”

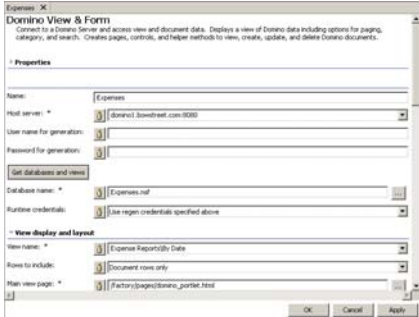


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Benefits for the Lotus Enterprise

- Direct Notes/Domino integration for Domino portlets; NO changes required to Domino
- Preserves & extends Domino applications and data; while providing a path to J2EE for Domino developers

Domino Builder



Domino Portlet



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Bowstreet Leverages Existing IT Assets















JSR 168
Portlet
Specification

Builders

Maximize system & intellectual property investments

Enterprise Applications & Services

- Lotus Domino
- SAP
- PeopleSoft
- Web Services, etc.

Legacy Data & Components

- JDBC
- EJBs
- JSPs

Create high-value Composite Portlets!



WSRP

JDBC™ Data Access API



Enterprise JavaBeans

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Portlet Factory Concepts

Builder
 A reusable component that generates Java, XML and JSP for specific portlet functionality

Profile
 A set of parameters that vary Builder inputs to dynamically generate unique versions of the portlet

Model
 A container of Builders

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Portlet Factory Concepts: Builders

```

/**
 * Generated Method [_pageDispatcher]
 * Generated by builder call [bc21]
 */
public void _pageDispatcher(WebAppAccess webAppAccess)
{
    com.bowstreet.webapp.JSPSupport.dispatch(webAppAccess);
}

/**
 * Generated Method [getFlights_PagingGetName]
 * Generated by builder call [bc21]
 */
public String getFlights_PagingGetName(WebAppAccess webAppAccess,
String button, String position)
{
    PagingAssistant asst =
(PagingAssistant)webAppAccess.getVariables().get("getFlights_Paging");
    String img = button + position;
    if ((button.equals("First")) || button.equals("Prev")) &&
!asst.hasPreviousPage())
        img = button + "Disabled";
    if ((button.equals("Next")) || button.equals("Last")) && !asst.hasNextPage())
        img = button + "Disabled";
    return
webAppAccess.getVariables().getXmlText("getFlights_PagingButtonImages",
img);
}

/**
 * Generated Method [getFlights_PagingGetAction]
 * Generated by builder call [bc21]
 */
public String getFlights_PagingGetAction(WebAppAccess webAppAccess,
String baseAction)
{
    PagingAssistant asst =
(PagingAssistant)webAppAccess.getVariables().get("getFlights_Paging");
}

```

Builders

Simplify J2EE coding complexity through graphical, wizard-like interface

Generate error-free J2EE-compliant code automatically

Speed development up to 12x, through development and test time savings

Automatically generate new code when inputs change enabling free iteration and routine maintenance

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Portlet Factory Concepts: Profiles

**Role-Based Profile Example:
Employee Portlet**

Manager

- Full Data View
- Edit Capability

Employee

- Limited Data View
- No Edit Capability

Bowstreet Portlet Factory

WebSphere Portal Server

Full View Portlet

Information for Employee # 0000010009

Personal Info

First Name	Middle	Last Name
Bruce	Xavier	Adamson
Nickname	Suffix	Language
Bruce	MSA	English

Employment Info

Department	Job Function
Engineering	Director

Contact Info

Phone Number	Fax
603 555 1525	603 555 1523
Email	
Adamson@bowstreet.com	

Limited View Portlet

Name and Address

First Name	Middle	Last Name
Bruce	Xavier	Adamson
Suffix	MSA	
Email	Adamson@bowstreet.com	
Department	Engineering	
Phone	603 555 1525	

- Same Model
- Different Profile

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Portlet Factory Concepts: Profiles

- Enable rapid reuse of portlets
- Ease complex & evolving business requirements
- Profiles examples:
 - **Role** (Employee, Manager, Executive, etc.)
 - **Group** (Accounting, Sales, Customer Service, etc.)
 - **Geography** (Time Zone, Language, etc.)
 - **Constituency** (Customer, Partner, Vendor, etc.)
- Profiles drive Builders to dynamically change:
 - **Presentation** (format, graphics, colors, etc.)
 - **Logic** (workflow, conditions, etc.)
 - **Data** (sources, queries, etc.)

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Support for JSR 168

One model...

...can run as a portlet in *any* JSR 168 compliant portal

#	P	Name	Type
1		orders	Data View Portlet
2		Sort	Data Column Modifier

WebSphere Portal

Sample JSR 168 Compliant Portlet

Order ID	Date Ordered	Status	Date Shipped	Quantity	Amount	Billing
000719	2002-08-18	Shipped	2002-08-22	78	780.98	Credit
000716	2000-02-12	Out of Stock		4	457.72	Credit
000479	2001-05-01	In Process		38	287.51	Credit
000502	2001-04-02	Refunded	2001-04-26	8	290.34	Credit
001350	2001-10-21	Shipped	2001-10-28	58	498.60	Credit
007012	2000-10-27	In Process		53	530.46	PO
000207	2002-02-20	In Process		45	781.16	Credit
000116	2000-09-16	Out of Stock		32	279.63	Credit
000570	2000-11-25	In Process		78	670.93	PO
005561	2000-10-09	In Process		2	800.99	Credit

Apache Pluto

Pluto - Reference Implementation

Sample JSR 168 Compliant Bowstreet portlet

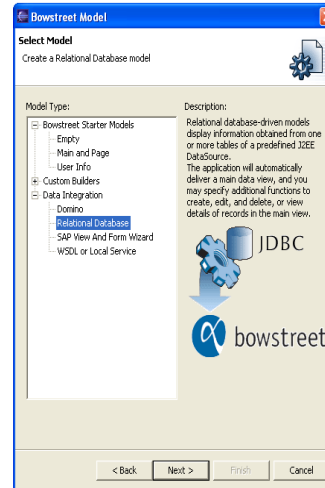
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Bowstreet Portlet Factory v5.9



Model creation wizards

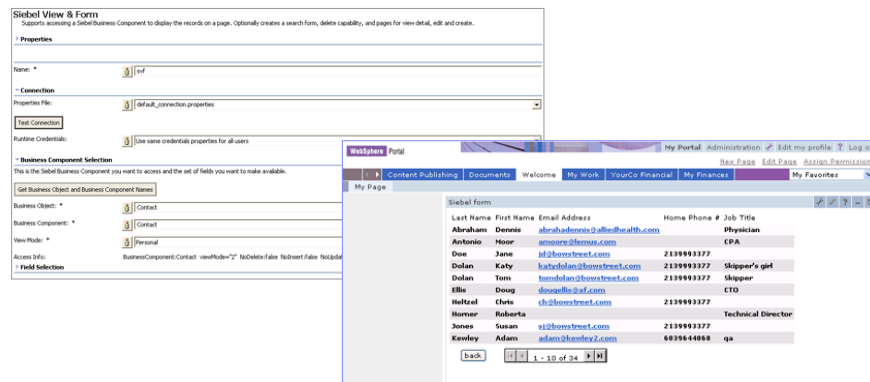
- Eases learning curve for new users
- Streamlines Model creation process for common portlet types
- Jumpstarts development of portlets that can view, create, edit, and delete data from backend systems like Domino and SAP



New wizards streamline model creation

New Siebel Builders

- Quickly create Siebel portlets without knowing Siebel's API
- Rapidly deploy portlets to IBM WebSphere Portal
- Strategically distribute business and customer data throughout your portal community



Localization Builder

- Easily create multi-lingual portlets
- Dynamically change languages based on criteria such as user authentication

Category View Builder

- Easily display categorized data from systems like Domino
- Automatically create interactive navigation of data

Director	Year	Title	Source
▶		Jim Abrahams	
▶		Robert Aldrich	
▶		James Algar	
▼		Woody Allen	
	1977	Annie Hall	[AFI Top 100, Ebert's Great Movies, Oscar - Best Picture, AFI's 100 Years...100 Passions, AFI's 100 Years...100 Laughs]
	1971	Bananas	AFI's 100 Years...100 Laughs
	1979	Manhattan	[Ebert's Great Movies, AFI's 100 Years...100 Passions, AFI's 100 Years...100 Laughs]
	1973	Sleeper	AFI's 100 Years...100 Laughs
	1969	Take The Money And Run	AFI's 100 Years...100 Laughs
▶		Robert Altman	
▶		Michael Anderson	

SAP BW Data Access Builder

- Rapidly create portlets that access SAP's Business Warehouse using the XMLA protocol

*SAPBWDataAccess X

*sapbw X

SAP BW Data Access
Provides methods for executing an MDX expression against a SAP Business Warehouse.

► **Properties**

Name: * sapbw

► **Request info**

Minimal data needed for the SAP BW request

SAP BW URL: * http://localhost:8081/sap/bw/xml/soap/xmla

Command: *
<Command>
<Statement> SELECT [Measures].MEMBERS ON AXIS(0), NON EMPTY [ORPLANT].MEMBERS * [QMAT_PLANT__DUSG].MEMBERS ON AXIS(1) FROM [DUMINVA/DUMINVA]_DU_MDX_Q001_JMELT] </Statement>
</Command>

► **Advanced**

Additional support for platforms/standards

- Bowstreet Portlet Factory now supports:
 - IBM Rational Application Developer 6
 - Eclipse 3.0
 - IBM Portal Toolkit embedded Portal Server
 - Apache Axis including incoming and outgoing web services calls
 - JBOSS 4.0

Summary - Value Propositions

- J2EE Made Easy
 - More effectively use existing developer resources
- Rapid Application Development for Portlets
 - Build portlets up to 12X faster
- Rapid Application Variation, Maintenance & Deployment
 - Reuse and changes become routine, empowering IT to respond to the evolving LOB requirements
- Eases Portalization of Lotus Domino
 - Leverage investment in legacy Notes DBs & applications
- Extends WebSphere Development & Portal Deployment
 - Expand community of portlet developers beyond highly skilled J2EE/Java resources
- Distributed Portlet Development & Test
 - Portal not required to develop & test; portlet developers need no installation/knowledge of portal application

Session Summary

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Lab 2.4 - Bowstreet Portlet Factory Lab Overview:

- Lab Key points
 1. Using the Bowstreet Portlet Factory tool to create a Portlet
 2. Retrieving Data from a Data source (Domino or DB2)
 3. Adding 'People Awareness' to your Portlet using the Bowstreet