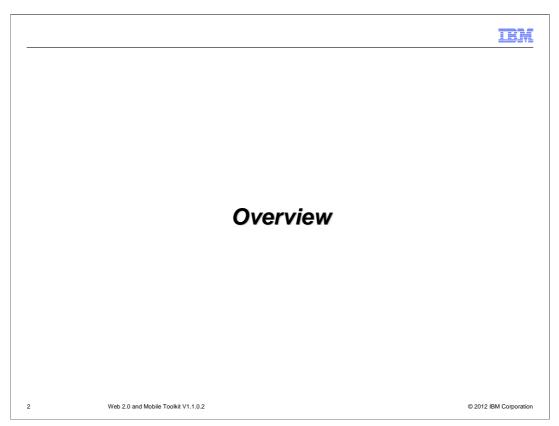
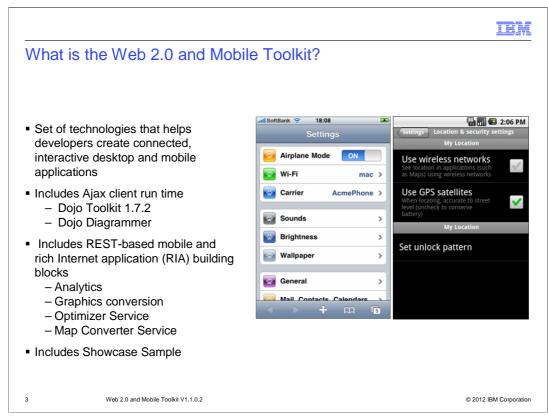


This presentation describes support for the Web 2.0 and Mobile Toolkit V1.1 included in IBM WebSphere Application Server V8.5.



The Web 2.0 and Mobile Toolkit uses standards-based technologies to help developers create connected, interactive desktop and mobile applications.



The Web 2.0 and Mobile Toolkit adds simplified, standards based development of mobile web applications, rich Ajax websites, and Representational State Transfer (REST) web services.

The Web 2.0 and Mobile Toolkit includes an Ajax client runtime, which consists of Dojo 1.7.2 and IBM extensions to the Dojo Toolkit including Dojo Diagrammer. Dojo 1.7.2 includes mobile capabilities to help with the development of web based mobile applications for smart phones and tablets. Dojo Diagrammer is a set of Dojo widgets with advanced diagramming and graph layout capabilities. Dojo Diagrammer provides a solution for Dojo-based applications to display and interact with graphs, such as networks of nodes connected by links. Mobile capabilities included in the Ajax client runtime are web-based. Native and Hybrid mobile development is not included in the Web 2.0 and Mobile Toolkit.

The Web 2.0 and Mobile Toolkit also includes a set of rest based application services designed to work with Dojo 1.7.2 and other rest based clients. These application services simplify the development of Ajax and mobile applications. These application services are Java Platform Enterprise Edition installable applications.

Finally the Web 2.0 and Mobile Toolkit provides a showcase gallery featuring newly available functions from the Ajax client runtime and application services. The showcase gallery includes sample code that can be used as a starting point for developing Web 2.0 and Mobile applications

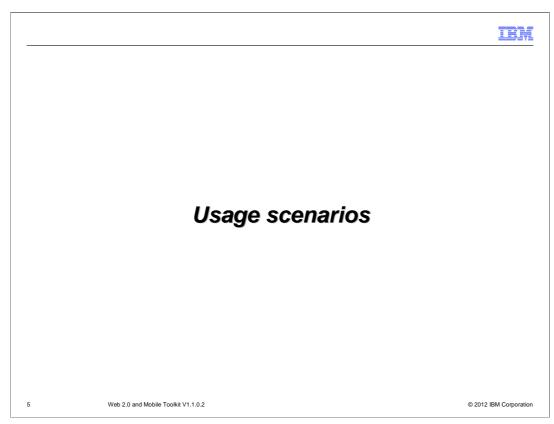
What is new with Web 2.0 and Mobile Toolkit?
<ul> <li>Successor to Web 2.0 and Mobile Feature Pack</li> </ul>
<ul> <li>Standalone Installation Manager Offering</li> </ul>
<ul> <li>Ships with WebSphere Application Server V8.5</li> </ul>
<ul> <li>Web 2.0 and Mobiles samples now available in the 8.5 Samples Infocenter</li> </ul>
<ul> <li>Some previous Web 2.0 and Mobile Feature Pack server-side content has moved into WebSphere Application Server Base, Network Deployment, Express, and Developers Edition</li> </ul>
<ul> <li>Feedsphere libraries, ibm_atom, ibm_opensearch, and ibm_gauge, and some samples no longer shipped</li> </ul>
<ul> <li>Only supported DojoX modules are included in Ajax client run time Other DojoX modules are made available as a free, as is download</li> </ul>
4 Web 2.0 and Mobile Toolkit V1.1.0.2 © 2012 IBM Corporation

The Web 2.0 and Mobile Toolkit V1.1 is the WebSphere Application Server V8.5 successor to the WebSphere Application Server V6.1, V7.0, V8.0 Web 2.0 and Mobile Feature Pack. There are many changes to consider as you move from the Web 2.0 and Mobile Feature Pack to the Web 2.0 and Mobile Toolkit.

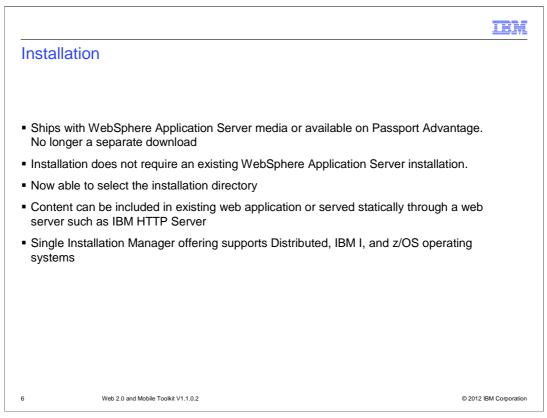
The Web 2.0 and Mobile Toolkit is now a stand-alone Installation Manager offering that does not require the selection of an existing WebSphere Application Server installation during install. You can now choose which directory to install the Web 2.0 and Mobile Toolkit.

Samples are now available in the 8.5 Samples Infocenter and are no longer installed by the Web 2.0 and Mobile Toolkit. Some Feature Pack samples, such as QuoteStreamer, and RPCAdapter samples, are no longer available with the Web 2.0 and Mobile Toolkit.

Feature Pack server-side applications and optionalLibraries that have been moved into application server installation. The libraries and applications that have moved include: RPCAdapter libraries, Web messaging libraries, webdav extension library, and the AjaxProxy installable application. Feedsphere libraries are no longer available with the Web 2.0 and Mobile Toolkit. Finally, the Web 2.0 and Mobile Toolkit only includes stable and tested Dojo 1.7.2 DojoX modules. Experimental DojoX modules are available in a separate download. Information on DojoX modules availability is included later in the presentation.



The Web 2.0 and Mobile Toolkit is used in the following scenarios.



The Web 2.0 and Mobile Toolkit is now shipped with WebSphere Application Server V8.5. The toolkit is available on physical media and Passport Advantage. The toolkit is also available as freely downloadable iLan Installation Manager offering that will be available on DeveloperWorks.

The Web 2.0 and Mobile Toolkit is delivered as a Installation Manager repository installable on multiple operating systems including IBM I and z/OS and is installable through Installation Manager. Installed Web 2.0 and Mobile Toolkit content consists of the Ajax client runtime and a set of installable applications. The Ajax client runtime consists of static HTML and JavaScript that is used in a web application that can be included in a web application and installed on WebSphere Application Server or the WebSphere Application Server Liberty profile. This static content can also be served through a web server such as IBM HTTP Server.

An integrated development environment is recommended with the Web 2.0 and Mobile Toolkit content. Rational Application Developer or WebSphere Application Server Developer Tools for Eclipse are two recommended tools that include Dojo Toolkit tools.

stall Web 2.0 and M	obile Toolk	it (1 of 6	;)	11
BIM Installation Manager	Any research			
Install Packages				
Select packages to install:			- Andrew -	
Installation Packages	Status	Vendor	License Key Type	
■ ① IBM WebSphere Application Server Web 2.0 ■ Q <sub>g</sub> Version 1.1.0.2	and Mobile Toolkit	IBM		
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IBM WebSphere Application Server Web 2.0 and Mo The Web 2.0 and Mobile Toolkit adds simplified, standr Representational State Transfer (REST) web services. <u>Mi</u> • Repository: c:\work\LIVE_REPO	rds based development of mobile v	veb applications, rich Ajax	websites, and	
0	<	ack Next >	Install Cancel	
Web 2.0 and Mobile Toolkit V	.1.0.2			© 2012 IBM Cor

Installation of the Web 2.0 and Mobile Toolkit requires Installation Manager 1.5.2 or greater. Installation Manager is available on the product media, from Passport Advantage, and from IBM support pages. Once Installation Manager 1.5.2 or greater is installed, there are multiple Installation Manager installation modes supported including GUI, silent, and console modes. In the next slides we will walk through the graphical install. Refer to the Web 2.0 and Mobile Infocenter for more information on supported installation modes.

A link to start the installation is available from LaunchPad on the Web 2.0 and Mobile Toolkit media. If installing from Passport Advantage, enter the repository URL and credentials for the Web 2.0 and Mobile Toolkit in Installation Manager. Once done hit install. The first panel will list the installable software. A short description and a link to more information is included at the bottom. Select Version 1.1.0.2 of the IBM WebSphere Application Server Web 2.0 and Mobile Toolkit and hit next.

The next panel is the license acceptance panel. Reel through the license terms before accepting and hit next on this panel.

IBM Installation Manager	- Instructions	
Install Packages		
package into a directory that is not virtualized.	privileges on the Windows 7 operating system, you must install the applicati The Program Files directory on Windows 7 is virtualized. leges after it is installed, right-click the package, and click "Run as administr	
Install Licenses Location	Features Summary	
💿 Use the existing package group		
Package Group Name	Installation Directory	Archited
Package Group Name: Web 2.0 and Mobile Tool	kit V1.1	
Installation Directory: C:\Program Files (x86)\It	8M\WebSphere\Web20Mobile	Browse
Details	Disk Space Information	
Shared Resources Directory: c:\Programs\RAD\Si		

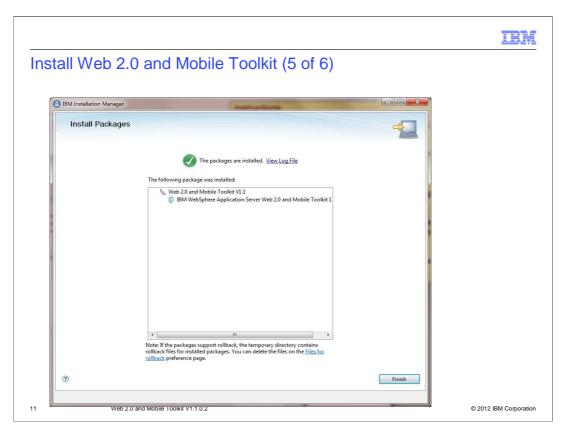
Installation of the Web 2.0 and Mobile Toolkit requires a new package group. Multiple installation of the Web 2.0 and Mobile Toolkit are possible through the creation of a new package group. When you create a new package group, you must select an empty directory where the toolkit content is installed. After completing these two fields, hit next to continue the installation.

IBM Installation Manager     Imstall Packages       Select the features to install.     Install       Licenses     Location       Features     Summary
Select the features to install.
Install Licenses Location Features Summary
Features
☑ 👔 IBM WebSphere Application Server Web 2.0 and Mobile Toolkit 1.1.0.2
-
Show dependencies Expand All Collapse All Estore Default
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Show dependencies Expand All Collapse All Restore Default  Sectore Default  Sectore Default  Collapse All Restore Default  Expand All Collapse All Restore Default  Details  IBM WebSphere Application Server Web 2.0 and Mobile Toolkit 1.1.0.2  The Web 2.0 and Mobile Toolkit adds simplified, standards based development of mobile web applications, rich Ajax websites, and Representational State Transfer (REST) web services.  Disk Space Information
Show dependencies     Expand All Collapse All Bestore Default     ✓- Selected by Installation Manager because of dependencies Details IBM WebSphere Application Server Web 2.0 and Mobile Toolkit 1.1.0.2 The Web 2.0 and Mobile Toolkit adds simplified, standards based development of mobile web applications, rich Ajax websites, and Representational State Transfer (REST) web services.
Show dependencies       Expand All Collapse All Restore Default

There is only one required feature available for the Web 2.0 and Mobile Toolkit. Hit next to continue the installation.

BM Installation Manager		
Install Packages Review the summary information.		
Install Licenses Location	Features Summary	
Target Location	reatures Jumminary	
Package Group Name: Web 2.0 and Mobil	le Toolkit V1.1	
	(86)\IBM\WebSphere\Web20Mobile	
Shared Resources Directory: c:\Programs\RAD\	SDPShared	
Packages Packages		
Environment	Disk Space Information	
English	Total Available Space C: 1.68 GB	
	Total Download Size: 52.82 MB	
	Total Installation Size: 143.85 MB	

The next page summarizes your previous installation options and shows available and required disk space. Verify the options and click Install to install the product.



Once the installation is complete an installation summary page is displayed. If there is a problem installing, an error message will be displayed and you select the "View Log File" link to get more information. Installation Manager is also used to uninstall, apply maintenance, and uninstall maintenance. See the Web 2.0 and Mobile Toolkit information center for more information on these operations.

			Manual Street, or other			• ×
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Organize 👻 Include in lil	brary 🕶 Share with 💌 Burn	New folder				
🔆 Favorites	Name	Date modified	Туре	Size		
🧱 Desktop	🎍 ajax-rt_1.X	5/22/2012 4:04 PM	File folder			
Downloads	installableApps	5/22/2012 4:03 PM	File folder			
📃 Recent Places	lafiles	5/22/2012 4:04 PM	File folder			
	🎍 properties	5/22/2012 4:03 PM	File folder			
; Libraries	🗼 readme	5/22/2012 4:03 PM	File folder			
Documents	uninstall	5/22/2012 4:04 PM	File folder			
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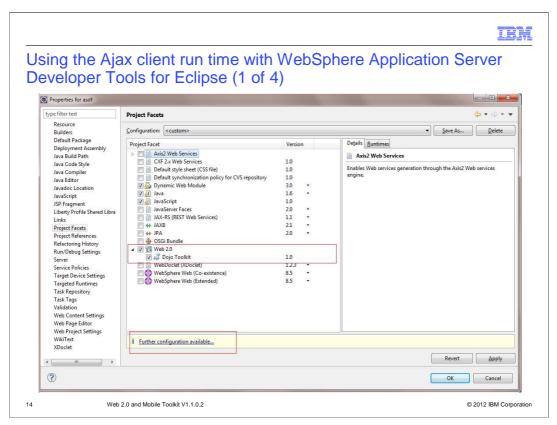
These are the directories that are installed by the Web 2.0 and Mobile Toolkit. The ajaxrt\_1.X contains Dojo 1.7.2 and the ibm\_ilog, and ibm\_soap Dojo extensions. The installableApps contains the 5 application services web application archive files that can be installed to WebSphere Application Server or the WebSphere Application Server Liberty profile. A readme file includes links to the Web 2.0 and Mobile Infocenter, 8.5 Samples Infocenter, the location of the DojoX download and links to other key information.

The Web 2.0 and Mobile Toolkit does not ship with a Java SDK or with a versionInfo executable. The version number for the Web 2.0 and Mobile Toolkit can be determined by looking at the properties/version/W2MTK.product file. You can also use Installation Manager to determine the version. Use Installation Manager to determine if any ifixes have been installed. The Web 2.0 and Mobile Toolkit does not install any executable programs.

Additional Dojo Toolkit information is available in the ajax-rt\_1.X/version.txt and ajax-rt\_1.X/README.txt.

		IBM
Using the	Ajax Client Runtime	
■ Ajax client r _ _ _	un time includes Dojo 1.7.2 Dojo 1.8 modules - DojoX Calendar, DojoX Gauges, DojoX Mobi DojoX TreeMap. ibm_ilog – IBM Dojo Diagrammer extension	le,
-	ibm_soap – IBM extension	
Static web of a static web	content. HTML and JavaScript	
■ Embed in w _	eb application or place Ajax client run time content on web server. Run Dojo enabled applications on WebSphere Application Serve Liberty profile	r
http://dojoto	olkit.org/	
13	Web 2.0 and Mobile Toolkit V1.1.0.2	© 2012 IBM Corporation

The Ajax client runtime includes Dojo 1.7.2, the Calendar, Gauges, Mobile, and Treemap DojoX modules from Dojo 1.8. The Ajax client runtime also includes Dojo Diagrammer and ibm\_soap Dojo extensions. Additional information about Dojo 1.7.2 is available on dojotoolkit.org and in the Web 2.0 and Mobile Infocenter.



An integrated development environment is useful when developing web 2.0 and mobile applications. WebSphere Application Server Developer Tools for Eclipse includes support and tools for Dojo 1.7.2 and the ibm\_ilog and ibm\_soap Dojo Toolkit extensions.

The following four steps should show how to use the Ajax client runtime installed by the Web 2.0 and Mobile Toolking Dojo 1.7.2 with the Developer Tools for Eclipse. The first step is start developer tools and create a new dynamic web project. Once the dynamic web project is created, open the Project facets and select Dojo Toolkit under Web 2.0. Then click further configuration.

Modify Faceted Project			Dojo Project Setup Options	. D
Dojo Project Setup Specify how this project will acc	cess Dojo	dōjō	Dojo Project Setup How will this project access Dojo?	dōjō
Dojo Project Setup Summary The following Dojo toolkit: D will be copied into this projec	t at location: dojo		Location  © Copy Dojo into this project. It will be deployed from there.  Dojo is in a project in the workspace, and will be deployed from there.  Dojo is remotely deployed or is on a public CDN.	
<b>?</b>	< <u>B</u> ack <u>N</u> ex	t> OK	< Back Next > Einish	Cancel

By default the Dojo 1.7.2 installed with the Developer Tools for Eclipse is used. This version of Dojo 1.7.2 does not include the ibm\_ilog and ibm\_soap extensions. If you need these extensions, or want to pick up a more recent version of the Ajax client run time installed with the Web 2.0 and Mobile Toolkit, select "Change these setup options." On the next prompt keep the default value and select next.

	IBM
Using the Ajax client run time with WebSphere Application Serve         Developer Tools for Eclipse (3 of 4)         State of the Dojo Project Setup Option         Dojo Wile deployed as part of this project.         Dojo will be deployed at this location, relative to the content directory.         Foldeg:         Or project Setup Option         Versite Dojo Toolkit 50k17:         Or Disk         Versite Dojo Toolkit 50k17:         State the Dojo Toolkit Social on relative to the project.         Dojo components to be included in the project.         Dojo digio Collike SDk17:         State the Dojo components to be included in the project.         Dojo components to be included in the project.         Dojo components to be included in the project.         Doje digio         Digio Client SDk17:         Create complete folder structure         Or Disk         WebSphere Web20Mobile Jigsort I.X         Doje components to be included in the project.         Doje components to be included in the project.         Doje digio         Digit digits into nog         Digit digits into nog	<u>.</u>
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On the next panel, select the "on disk" option and choose the location of the Web 2.0 and Mobile Toolkit ajax-rt\_1.X directory. After selecting the directory you are able to select the Dojo 1.7.2 and ibm extension options to include in the application. You will also be able to select other options, such as whether to include demos and tests or experimental files.

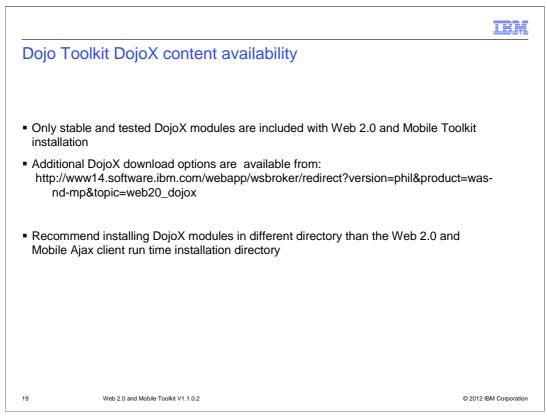
			Dojo Build T	ools	
New Dojo Wid <b>jo Widget</b>	get		Dojo Build To Create a Custo	<b>sols</b> om Dojo Build and/or layer files	
reate a new cu	stom Dojo widget.	dōjō	Profile:	/asdf/WebContent/dojo/util/buildscripts/profiles/standard.profile.js	Browse
dule Name:			Optimization:	Shrinksafe	•
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e following re: ML Template: lesheet:	sources are relative to your module path.		Layers:	☐ dojojš /dijt/dijtjs /dijt/dijt_šlljs /dojov/grid/DataGrid.js /dojov/grid/DataGrid.js	•
pertypes:		Add		All	None
	🔐 dijitWidget 🎡 dijitTemplatedMixin	Remove	Build Tools P	ronerties	
	G dijitWidgetsInTemplateMixin		1201000000000	ory: /asdf/WebContent/dojo/util/buildscripts	Browse
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After selecting the Dojo version to use, you will now be able to use the JavaScript and Dojo tools included with the V8.5 DeveloperTools. The examples show a new Dojo widget creation panel and new Dojo Toolkit custom build panel.



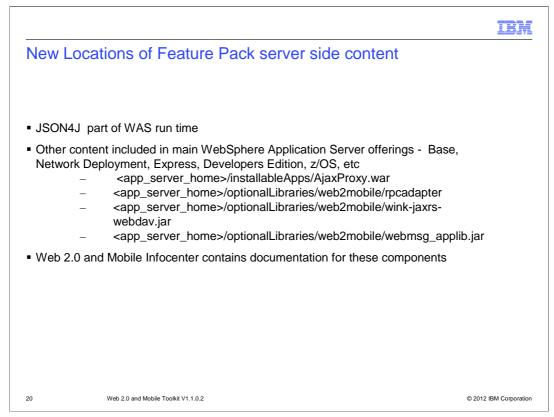
The latest version of IBM Rational Application Developer V8.5 also includes Dojo Toolkit tools. Rational Application Developer V8.5 includes the complete Ajax client runtime. Including ibm\_ilog and ibm\_soap. You should only need to point to the Web 2.0 and Mobile installed location if you need to pick up a newer Ajax client runtime version provided with the Web 2.0 and Mobile Toolkit. This includes picking up a fix applied to the Web 2.0 and Mobile Toolkit Ajax client runtime.

Rational Application Developer V8.5 also includes project facets for Web 2.0 and Mobile libraries including RPCAdapter, Web messaging, and Ajax Proxy. These libraries are installed with WebSphere Application Server Base, Express, Network Deployment, and Developers Edition.



The WebSphere Application Server Feature Pack for Web 2.0 and Mobile includes all Dojo Toolkit DojoX modules. The WebSphere Application Server V8.5 Web 2.0 and Mobile Toolkit includes a limited number of DojoX modules from Dojo Toolkit 1.7.2. Additional DojoX modules are available for download from the link listed here. These DojoX modules are mostly experimental DojoX modules. Additional information about the DojoX download is available on from the link above.

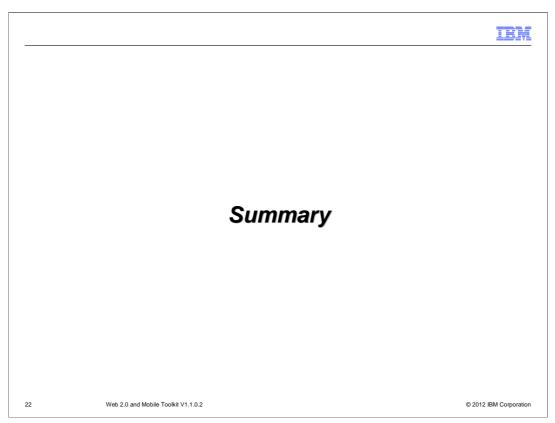
When installing the additional DojoX modules, avoid installed the DojoX extensions in the Web 2.0 and Mobile Toolkit ajax-rt\_1.X directory. The DojoX files should be installed in a temporary directory and then combined with Dojo 1.7.2 when creating a web application.



Some Server-side WebSphere Application Server Web 2.0 and Mobile Feature content has moved in V8.5 and is included in WebSphere Application Server V8.5P: Base, Network Deployment, Express, Developers Edition and z/OS installations. Documentation for these components is included in the Web 2.0 and Mobile Toolkit infocenter.

	Connections Home Part ( ) IBM WebSphere	Application ×	States and		
← → C ③ localhost:9080/Web3 IBM WebSphere Application	20MobileShowcase/ n Server Feature Pack for Web	2.0 and Mobile			ۍ ۲
Mobile		ILOG Diagrammer V	/isualizations		
Mobile samples are best viewed on a mobile dev Mobile Showcase Extensive collection of examples	vice or a WebKit based browser.	Organization Cha Displays a large organi		Business Process Diagram	
Charts Mobile stock chart demo	MVC Mobile model-view-controller	Edit disgrammer Edit	tor vser	Layout Browser Layout algorithm overview	
Maps Mobile OpenLayer maps	Geo Charting Mobile geo population demo	Features	Data store	OEV Louist	
Map Gallery Mobile maps drawn from data	Touch Mobile touch events	Simple Diagram Graph Layout	Overview	GFX Layout Selection	
Diagrammer Client-side Client-rendered node-arc graphs	Diagrammer Server-side Server-rendered node-arc graphs	Simple Graph	Subgraphs	Templating	
Diagrammer Organization Chart		Tooltips	Accessibility	Clipping to shape	
Mobile organization chart Application Services		Widgets in nodes and links	Editing Workbench	GFX pad	
File Uploader Upbodd using JAX-RS	Directory Listing Browse remote file systems	Web Worker graph layout Nested diagrams	Layout Animation	Link Decorations Spline links	
Graphics Convert file formats, scale images	Optimizer Use a cache proxy with Dojo	SVG export	Swimlanes	Layout Explorer	
Analytics Track and log dojox.analytics events	Map Converter Convert Shape files to JSON				

The Showcase sample is a comprehensive sample application that includes multiple samples including Dojo, DojoX mobile, Dojo Diagrammer, and application services samples. The Showcase sample is available from the WebSphere Application Server 8.5 infocenter and not installed with the Web 2.0 and Mobile Toolkit.



There are many changes to consider when moving from the Web 2.0 and Mobile Feature Pack to the Web 2.0 and Mobile Toolkit. This presentation outlined these changes and summarized how to install and use the Web 2.0 and Mobile Toolkit content. The Web 2.0 and Mobile Toolkit is a valuable WebSphere Application Server addition that can help developers create interactive desktop and mobile applications.

References
<ul> <li>WebSphere Application Server V8.5 Infocenter - http://www14.software.ibm.com/webapp/wsbroker/redirect?version=phil</li> </ul>
<ul> <li>Dojo Toolkit - <u>http://dojotoolkit.org/</u></li> </ul>
DojoX zip download -
http://www14.software.ibm.com/webapp/wsbroker/redirect?version=phil&product=was-nd-mp&topic=web20_dojox
<ul> <li>Developers Edition Download - <u>http://www.ibm.com/developerworks/downloads/ws/wasdevelopers/index.html</u></li> </ul>
Wasdev - https://www.ibm.com/developerworks/mydeveloperworks/blogs/wasdev/entry/home?lang=en
Web 2.0 and Mobile Feature Pack - <u>http://www-01.ibm.com/software/webservers/appserv/was/featurepacks/web20-mobile/</u>
<ul> <li>Web 2.0 and Mobile FeP Community - https://www.ibm.com/developerworks/mydeveloperworks/groups/service/html/community/wiew?communityUuid=94e7/tded-7162-445e-8ceb-97a2140866a9</li> </ul>
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See these references for additional information about the Web 2.0 and Mobile Toolkit.

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