Quick Apps for SharePoint
Computer-Based Training (CBT)

Quick Start Guide
Written by Dan Barker, Product Manager

CBT created by Devworkz Pty Ltd
Introduction

The Quick Apps for SharePoint (formerly Web Parts for SharePoint) Computer-Based Training (CBT) enables users get up to speed quickly with Quick Apps so they can successfully build and customize SharePoint applications without custom code.

After taking the CBT, users will:

- Watch and learn how to configure and use Quick Apps for the most common use cases
- Get hands-on experience with Quick Apps in an isolated training environment

About the CBT
The CBT consists of a pre-configured SharePoint environment, a series of worked examples and training exercises for each web part and quick-start videos showing how to complete the exercises.

**Infrastructure**

The CBT is built upon the following installed items:

- Windows Server 2008
- SQL Server 2008
- SharePoint 2010 Foundation
- Quick Apps for SharePoint, version 5.5

**Pre-configured SharePoint site structure and content**

The training environment is configured in a SharePoint site collection with a “Management site” and 10 lower-level sub sites representing sales teams and operational business units. The five sales team sites each represent five sales regions; combined they represent the national sales. Each site is based on the standard “Team site” template. Pre-configured content exists on these sites for use in the training exercises.

![Site structure for the training environment](image)

**Worked examples and training exercises**

The CBT comes with 41 pre-configured worked examples covering the most common use cases of each web part. There are also 41 private work spaces for users to complete each exercise. Access to the worked examples and exercises is provided by the built-in menu and security.
Please note: the videos were recorded showing an alternative navigation scheme using the qCascadingMenu web part across the top of each page. The navigation has been changed to use the qPanelMenu, which is on the left side of each page. Therefore, the videos will refer to the old menu navigation, but you will use the new navigation scheme should you decide to perform the exercises.

Video training

There are 18 quick-start videos (one for each web part) that explore the worked example and walk trainees through the configuration of each exercise. The videos are streamed from within the CBT environment, or you can watch them now by clicking on the links in the Quick-start videos section below. Note: the qDynamicLayout, qMediaView and qManagement web parts are not covered within the CBT at this time. However, there are qDynamicLayout, qMediaView and qManagement videos available on Quest TV.

Training Modules

The CBT is split into three modules, each aligning to a Quick Apps bundle option and coming with its own security group.

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Quick-start videos

For many customers, watching the Quick-Start videos will be a sufficient method to learn the core principles of Quick Apps. You can watch them now by clicking on the links below. If you want to setup the CBT site in your environment and enable individuals (trainees) in your organization to perform the exercises shown in the videos, go to the CBT Environment Setup below.

Quick-start videos: Module 1

qListView Web Part

- Click here to watch the video.

This video covers the core configuration options and how to connect to lists on the current site and across sites. The qListView enables you to view and aggregate content from anywhere across your SharePoint farm.

- Exercise 1 – Connecting to a single list
  - Learn how to connect to the SalesResults list on the North team site.
- Exercise 2 – Connecting to multiple lists on different team sites
- Exercise 3 – Grouping, sorting and changing the display fields
  - Explore the option of grouping content by selected columns. Also see how to sort content and edit the column names.
- Exercise 4 – Using the export, print and paging options
- Exercise 5 – Enabling user-defined search and filtering options
- Exercise 6 – Configuring the CAML filter.
- Exercise 7 – Formatting content in the grid display
  - Explore the options for reformatting the grid display by using skins, alternate row formats and/or conditional formatting.
- Exercise 8 – Creating hierarchical displays
  - See how to connect the list ‘customer names’ and ‘contacts’ in a single view.
- Exercise 9 – Customizing displays
  - Explore the options to fully customize the grid display with HTML and/or JavaScript.
- Exercise 10 – Using qListView with document libraries
  - Explore the document management capabilities such as folder management, copy, paste and move options.

- Exercise 11 – Configuring fixed values and links
  - See how to configure fixed values and links in grid display of the qListView.

qCalendarView Web Part
  ➢ Click here to watch the video.

This video covers the core configuration options and how to connect to lists on the current site and across sites. The qCalendarView enables you view and aggregate content from anywhere across your SharePoint farm.

- Exercise 1 – Generating a basic calendar based with a single list
  - See how to connect the qCalendarView to the ‘project tasks’ list to explore its core setting.

- Exercise 2 – Generating a calendar with multiple lists
  - Explore the option of aggregating sales data from five ‘SalesResults’ lists on the North, South, Central, East and West team sites to provide a national view of sales data.

qChartView Web Part
  ➢ Click here to watch the video.

This video covers the core configuration options and how to connect to lists on the current site and across sites. The qChartView lets you view and aggregate content from anywhere across your SharePoint farm in one of 39 different charting options.

- Exercise 1 – Generating a bar chart with a single series of data
  - See how to connect the qChartView with the five ‘SalesResults’ lists to show National Sales by month in a bar chart.

- Exercise 2 – Generating a bar chart with a multiple series of data
  - See how to connect the qChartView with the five ‘SalesResults’ lists to show National Sales by month and by sales region/team in a stacked bar chart.

- Exercise 3 – Generating a pie chart
  - See how to connect the qChartView with the five ‘SalesResults’ lists to show National Sales by region/team in a pie chart.
qDiscussionView Web Part
- Click here to watch the video.

This video covers the core configuration options and how to connect to discussion lists. The qDiscussionView displays the discussions and their responses in a tree structure making it much easier to find the relevant topic.

- Exercise 1 – Generating a qDiscussionView
  - See how to connect the qDiscussionView web part with several ‘discussion’ lists.

qExcelView Web Part
- Click here to watch the video.

This video covers the configuration of the qExcelView web part, which works in conjunction with the qListView and enables users view their data in Microsoft Excel.

- Exercise 1 – A sample qExcelView configuration
  - See how to connect the qExcelView with qListView to explore its capabilities.

Quick-start videos: Module 2

qListForm Web Part
- Click here to watch the video.

This video covers the configuration of the qListForm web part, which replaces the Microsoft List Form web part. The qListForm enables you to create relationships among the lists and to enhance data consistency and accuracy.

- Exercise 1 – Creating a simple form with the qListView web part
  - See how to create a simple form and explore the New, Edit and Display options.

- Exercise 2 – Creating a Parent/Child lookup feature
  - See how to configure ‘one-to-many’ data relationships with the qListForm and qListView web parts.

- Exercise 3 – Auto filling fields from a master list of data
- Exercise 4 – Invoking the qListForm from qListView web part
- Exercise 4 – Working with the Dynamic Component Behavior
  - Explore the dynamic behaviors that can be configured within this web part.
• Exercise 5 – Defining a Dependent List
  o Explore the concept of list dependencies and how this supports a relational data model.

• Exercise 6 – Inline filtering of cross site “master data”

**qSelector Web Part**

➢ [Click here to watch the video.](#)

The qSelector displays data from a SharePoint list in a dropdown control. The qSelector remembers the last item selected, even after you leave the page. You can use qSelector to keep the context of your work. For example, you can manage multiple projects in one workspace easily or you can place a selector above a qListForm to select a certain item, and then feed that item to the qListForm because the qSelector is a row provider.

• Exercise 1 – Connecting the qSelector with the qListView web part
  o See how the qSelector works with the qListView web part.

• Exercise 2 – Connecting the qSelector with the qListForm web part
  o See how the qSelector works with the qListForm web part.

**qMultiSelector Web Part**

➢ [Click here to watch the video.](#)

The qMultiSelector displays data from one or more SharePoint lists in a dropdown control. When multiple selectors are displayed, one selector will filter the next one.

• Exercise 1 – Configuring the qMultiSelector
  • See how to configure the qMultiSelector with three dropdowns and a qListView web part.

**qPanelMenu Web Part**

➢ [Click here to watch the video.](#)

The qPanelMenu groups navigation items into multiple panels, similar to that of the left side of Microsoft Outlook.

• Exercise 1 – Configuring the qPanelMenu
  o See how to configure the qPanelMenu.

**qCascadingMenu Web Part**

➢ [Click here to watch the video.](#)
The qCascadingMenu provides a hierarchical menu system and enables you to create complex menus that occupy minimal screen real estate.

- Exercise 1 – Configuring the qCascadingMenu
  - See how to configure the web part and how to add it to the default.master or the v4.master page.

qCaptionDisplay Web Part
  ➢ [Click here to watch the video.](#)

This web part displays a message from a SharePoint list. The text for the message is identified with a Caption ID. Storing the message in a list, as opposed to hard coding it in a page, increases the site maintainability.

- Exercise 1 – Configuring the qCaptionDisplay
  - See how to configure a sample qCaptionDisplay from a list held on our ‘Master‘ data site.

qHelpLink Web Part
  ➢ [Click here to watch the video.](#)

The qHelpLink provides a context-sensitive help functionality. It enables each page to be connected to a different help file or to no help file (in which case the help link will not be visible). This capability lets the site administrator or author issue the help files in stages.

- Exercise 1 – Configuring the qHelpLink
  - See how to configure a sample qHelpLink from a list held on our Master Data site.

qPageRedirector Web Part
  ➢ [Click here to watch the video.](#)

The qPageRedirector sends users to a designated URL. The qPageRedirector reads a list that contains two columns: User Name and URL. It will search the list for the entry with User Name equals to the current logged on user. If it finds it, it will redirect the user to the URL mapped to that user in the list.

- Exercise 1 – Configuring the qPageRedirector
  - See how to configure a sample qPageRedirector web part.

qItemDisplay Web Part
  ➢ [Click here to watch the video.](#)

The qItemDisplay displays the item that was put into a session variable by another web part, such as qListView or qListForm
Exercise 1 – Configuring the qItemDisplay
  o See how to configure a sample qItemDisplay web part.

Quick-start videos: Module 3

qSIListView Web Part
  ➢ Click here to watch the video.
Display data from your external system in a grid. All of the grouping, sorting, filtering and search capabilities found in the qListView web part are also available in the qSIListView.
  • Exercise 1 - Connecting to a SQL database
    o Learn how to connect to the ‘Purchase Order’ table in the AdventureWorks database.
  • Exercise 2 – Changing the format of displayed data
    o Learn how to connect to the ‘Purchase Order’ table in the AdventureWorks database, then modify how data is displayed and complex filters can be applied.

qSIChartView Web Part
  ➢ Click here to watch the video.
This web part aggregates data from your external system and displays it in different chart types.
  • Exercise 1 - Connecting to a SQL database to display a simple bar chart
    o Learn how to connect to the ‘Purchase Order’ table in the AdventureWorks database and display in a chart.
  • Exercise 2 – Connecting to a SQL database to display multiple series of data in a bar chart
    o Learn how to connect to the ‘Purchase Order’ table in the AdventureWorks database and display data in a multi-series bar chart.

qSISelector Web Part
  ➢ Click here to watch the video.
The qSISelector web part displays data from an external source in a dropdown control:
  • Exercise 1 - Connecting qSISelector to the qSIListView
    o See how the qSISelector works with the qSIListView web part.
  • Exercise 2 – Connecting qSISelector to the qSIListForm
See how the qSISelector works with the qSIListForm web part.

qSIListForm Web Part

- **Click here to watch the video.**

The qSIListForm web part can be used to display, edit and update data in external applications.

- Exercise 1 - Connecting qSIListForm with SQL to display a record
  - See how the qSIListForm works with an SQL table to display a record.

- Exercise 2 – Connecting qSIListForm with SQL to edit a record
  - See how the qSIListForm works with an SQL table to edit a record.

- Exercise 3 – Connecting qSIListForm with SQL to create a new record
  - See how the qSIListForm works with an SQL table to create a new record.
CBT environment setup

Setting up the CBT environment is optional. If you are only interested in watching the videos, you can go to the Quick-start videos section above. If you want to setup the CBT site in your environment and enable individuals (trainees) in your organization to perform the exercises shown in the videos, complete the following steps.

Prerequisites for installing the CBT

Note: If your SharePoint environment does not meet the prerequisites below, you will not be able to create the CBT site.

1. SQL Server 2008 SP1, Version 10.0.2531.0 or above. Note: You can find the build number by executing the following SQL statement against your SQL Server instance in command line or SQL Server Management Studio:
   a. SELECT @@Version

2. One of the following versions of SharePoint:
   a. SharePoint 2010 Foundation
      i. June 2011 CU, Version 2 14.0.6106.5002 KB: 2536601
   b. SharePoint 2010 Server
      i. June 2011 CU, Version 2 14.0.6106.5002 KB: 2536599

Note: To find out your SharePoint 2010 version, go to Central Administration Web site, then “Upgrade and Migration”, then “Check product and patch installation status” this web page will show version numbers and what components are installed on what servers. Search the web page for the version number, “14.0.6106.5002”. If the hotfix is found, you will be able to create the CBT web application using the restored CBT database. If this hotfix is not found, you will get an error message when creating the CBT web application: “This content database has a schema version that is not supported in this farm” and you will not be able to create the CBT Web Application until the SharePoint version number matches 14.0.6106.5002.

Download CBT and restore database backup files

   a. WS_Content_QWP_CBT.bak
   b. Quest.WebParts.CBT.dll
2. Using SQL Manager, restore both database backup files to SQL Server 2008.
   a. Locate the SQL Server Management Studio icon by clicking ‘Start,’ ‘All Programs,’ ‘Microsoft SQL Server 2008’.
   b. Select ‘Database Engine’ from the ‘Server Type’ drop-down menu.
   c. Enter the server name or select it from the ‘Server name’ drop-down menu (if it already exists).
   d. Select the authentication option from the ‘Authentication’ drop-down menu (either ‘Windows Authentication’ or ‘SQL Server Authentication’). You are required to enter your username and password if using ‘SQL Server Authentication.’
   e. Click ‘Connect.’
   f. Right-click the ‘Databases’ folder in the Object Browser and click ‘Restore Database …’ in the menu that appears.
   g. Enter the database name, WS_Content_QWP_CBT.’
   h. Select the ‘From device’ option and click the button with the ‘…’ symbol.
   i. Click the ‘Add’ button and navigate to the folder on the server where the WS_Content_QWP_CBT.bak file is located.
   j. Double-click the WS_Content_QWP_CBT.bak file and then click the ‘OK’ button.
   k. Check the ‘Restore’ checkbox and click ‘OK’ to restore the database from the WS_Content_QWP_CBT.bak file.
   l. Repeat restore steps “f” through “k” for the AdventureWorksLT2008 database using the AdventureWorksLT2008.bak file.

Create a new SharePoint web application
3. Using SharePoint ‘Central Administrator’ (Application Management/Manage web applications), create a new Web Application. For the ‘Create a new IIS web site name’, enter ‘Quest Web Parts CBT – Your Port Number’. Use the same Port Number for the web site name as you
enter in the ‘Port’ field so you can easily identify the web site as the Quest Web Parts CBT. *SharePoint provides a default content database name. It is important to change the default database name from the default name to ‘WS_Content_QWP_CBT’ database—the database you restored in Step 1.* This will create a site collection with the following URL: http://your_server_name:your_port_number/sites/cbt. Don’t navigate to the new CBT site until you complete the next step or you will get an error because the entries in the web application’s web.config files to support Quick Apps have not been made yet.

4. Since a new Web Application was created, you will need to make changes to the web application’s web.config file to add entries that support Quick Apps. Go to the Windows ‘Start’ Menu and go to ‘All Programs’, ‘Quest Software’, ‘Web Parts for SharePoint’ and open the ‘Configuration Editor’.

5. Open the Web Application you created the CBT on by selecting, ‘File’, ‘Open’, ‘Web’. This will bring up the web.config for the Web Application. Starting from the top, for each row with a red explanation point, click the row and then click the ‘Fix’ button and click ‘Yes’ to on any confirmation dialog. When complete, click ‘File’ menu and click ‘OK’ on the Success Dialog—optionally, click ‘Yes’ on the reload.

6. The Quick Apps (formerly Web Parts for SharePoint) solution, “quest.webparts.wsp”, needs to be deployed to the web application you created for the CBT. Go to SharePoint Central Admin, ‘System Settings’, ‘Manage Farm solution’. Click, ‘quest.webparts.wsp’, ‘Deploy Solution’. In the Deploy Solution page, find the drop down list, ‘Choose a web application to deploy this solution’ and select the web application you created for the CBT. Click the ‘OK’ button. After a short wait, SharePoint will deploy the Quick Apps solution to the CBT web application (note: the SharePoint Timer Service must be running to deploy solutions. If it is not, start the SharePoint Timer Service).

Install CBT custom actions

7. In the CBT file extraction directory, run the script, ‘setupCBT.bat’. This script installs a SharePoint solution named, ‘WP_CBT.wsp’ which deploys a custom action DLL for trainee maintenance in the Server’s Global Assembly Cache (GAC). The script setupCBT.bat assumes ‘stsadm.exe’ is in the following default location: C:\Program Files\Common Files\Microsoft Shared\web server extensions\14\BIN\ If your environment differs, please modify the setupCBT.bat file accordingly.

Create CBT trainees

8. Once you access the CBT site, you will want to create trainees; however, only the CBT Admin can create and maintain CBT trainees. To gain access to the CBT Admin Menu, which is a menu option on the left navigation, you will need to add an Active Directory user to the SharePoint CBT_ADMIN group by going to the CBT site and accessing the ‘Site Actions’, ‘Site Permissions’.
9. Once the CBT_ADMIN group is populated, login as the CBT_ADMIN and you will see a Menu choice on the left side of the page called, ‘CBT Admin Menu’. Click the Trainee Maintenance link.

10. Click the ‘Create New Trainee’ button. Read the instructions on the page. Be sure to add all trainee Active Directory accounts to a SharePoint group within the CBT (for example, you can add each trainee to the ‘CBT Visitors’ group by selecting ‘Site Actions’, ‘Site Permissions’).

**Setup the Systems Integration (SI) worked examples**

11. Copy the SI.config file from the CBT file extraction directory to the Web Application’s virtual directory. For example: C:\inetpub\wwwroot\wss\VirtualDirectories\8082.

12. If you closed the QWP ‘Configuration Editor’, go to the Windows ‘Start’ Menu and go to ‘All Programs’, ‘Quest Software’, ‘Web Parts for SharePoint’ and open the ‘Configuration Editor’.

13. Open the Web Application you created the CBT on by selecting, ‘File’, ‘Open’, ‘Web’. This will bring up the Web.config for the Web Application.

14. On the Configuration Editor menu, select ‘Edit’, ‘QuestSoftware Section Editor’ and click the ‘Systems Integration’ tab.

15. Click the folder icon for the SI Config file, select the SI.config file you copied to the Web Application’s virtual directory in Step 1 and click the ‘OK’ button. Click the ‘SI Configuration (SI.config)’ tab. You should see a System called, ‘AdventureWorks DB on SPF-DEV\SharePoint’.

16. The connection string shown below will not be correct for your environment so you will need to change the items in **bold**:

   a. ‘Server=SERVER2\SQLEXPRESS2008; Database=AdventureWorksLT2008

   b. User ID: qwp_cbt_user

   c. Password: ******

17. You will need to correct the connection string and use either Windows Authentication or a SQL Server Login. Go to [http://www.connectionstrings.com/](http://www.connectionstrings.com/) to find a connection string that works for your environment. Be sure to click the ‘Test Connection’ button after configuring the connection string. The QWP CBT Worked Examples expect the Catalog name of ‘AdventureWorks DB on SPF-DEV\SharePoint’. If you change the name, you will have to change the name in all of the Systems Integrations Worked Examples in Module 3. So, initially, it is easier to leave the Catalog name the same.

Once all trainees are setup, the trainee can login and begin to use the CBT. CBT navigation menu options will be trimmed based on the modules each trainee can access, and each trainee will have their own Work Pages to perform ‘hands-on’ exercises. As each trainee watches the videos for each
part and performs the exercises for each web part, the trainee should be encouraged to update the exercise’s status by clicking the ‘Update Exercise Status’ link for each exercise. This will ensure the ‘Trainee Dashboard and ‘My Dashboard’ reflect accurate CBT training progress information.
Appendix: Virtual and advanced training options

Devworkz, the creator of this CBT, offers a combination of virtual and advanced training. You can have Devworkz host your CBT in a private, CloudShare environment, complete with all exercises and videos for up to five users. Devworkz also offers a virtual package including the CBT and the AppBuilder advanced training, which covers the inherent application development capabilities of Quick Apps. AppBuilder consists of eight themed sessions that build upon the CBT exercises and videos.

1. **Application architecture** – designing site page structures, navigation, security, master data and master pages
2. **Cross-site design** – patterns for centralized, distributed, process and publishing data
3. **Advanced configuration** – using ‘sessions’ to extend application functionality
4. **Relational data models** – ‘one to many’ and ‘many to many’ Primary keys and Foreign keys, data dependencies, data design
5. **Advanced form development** – layout, security, actions, behaviors, validation, wizard pattern
6. **Workflow integration**
7. **Systems Integration and Web Services** – Advanced SQL considerations and Stored Procedures, integration of Web Services
8. **Deployment and application management** – leveraging Deployment Manager for SharePoint

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For more information on virtual and advanced training options, including pricing, visit [www.devworkz.net/training](http://www.devworkz.net/training).