

## QuizMaster XML Application

### Installation Guide

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## HISTORY OF CHANGES

<i>Issue</i>	<i>Date</i>	<i>Description</i>
1a	04/12/07	Initial draft. Author: Robert D Mason
1	31/01/08	Formal issue.

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# 1. INTRODUCTION

This document is the Installation and Maintenance Guide for the QuizMaster Application for the OpenStage 60/80 IP Phone models.

The application is available as a prototype for demonstration purposes.

QuizMaster is an XML application which allows a user to participate in multiple choice style quizzes on their OpenStage 60/80 IP Phone. The questions and answers are picked from a database at random for each topic. Topics and questions can be added, edited and deleted by an administrator via a web portal.

## 1.1 Required Software & Files

- Quiz.war – Web Application Archive
- JRE V1.5 or later
- Apache Tomcat Web Server V5.5 or later.

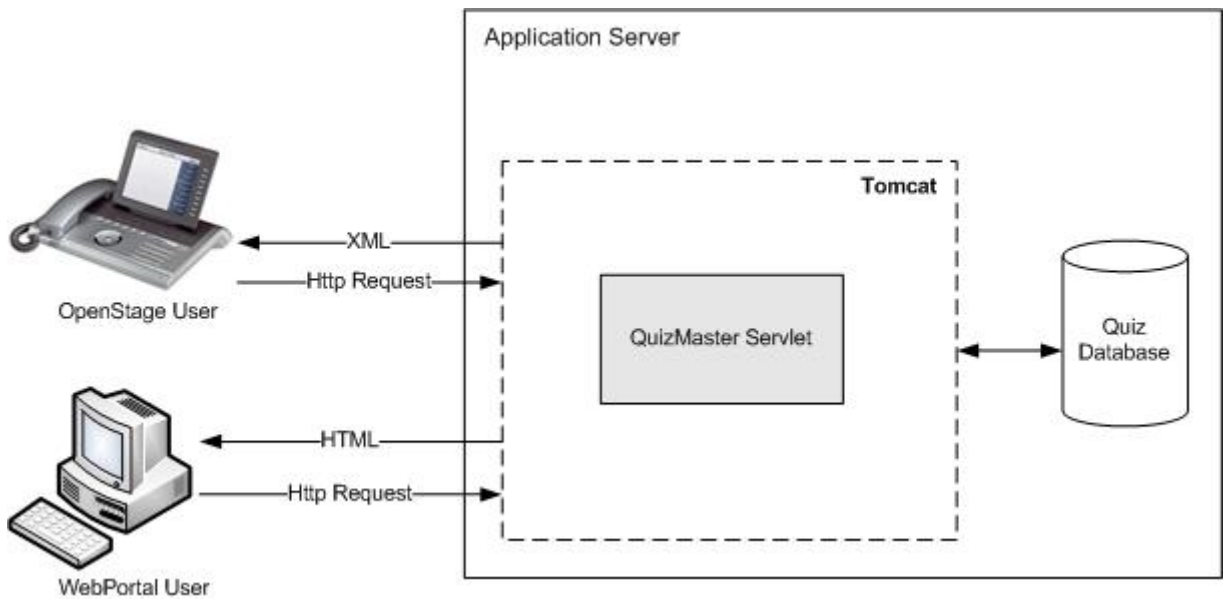
## 2. SCOPE

This document describes how an administrator can install and configure the QuizMaster application. It is assumed the reader has sufficient knowledge about the Application Server that the Servlet is being deployed on. It contains the required information for configuring the QuizMaster application to run on an OpenStage 60/80 IP Phone, deploying the Servlet onto a Tomcat Server, and configuring the QuizMaster database via the Web Portal.

The Java Runtime Environment 1.5 (or later) and Apache Tomcat 5.5 (or later) should be installed prior to this installation.

### 3. SYSTEM OVERVIEW

The image below shows an overview of the system.



#### 3.1 Network

No internet connection is required to run the QuizMaster Application; therefore proxy settings should not need to be configured.

#### 3.2 Application Server

QuizMaster has been tested on the following configuration:

- Windows XP with Service Pack 2
- P4 3.2GHz Processor with 504Mb RAM
- Java Runtime Environment 1.5

Testing will be required for use with other versions of software and operating system.

#### 3.3 IP Phone

QuizMaster runs on an OpenStage 60/80 which must be V1 R3.6 SIP or later.

Please refer to the OpenStage documentation on how to install the correct phone firmware.

## 4. QUIZMASTER INSTALLATION

The installation can be broken down into the following steps:

### 4.1 Installing the Servlet

Note: Prior to installation you will need to have the Java Runtime Environment 1.5 or later installed and Apache Tomcat 5.5 or later installed.

The JRE 1.5 can be downloaded from: <http://www.java.com/en/download/manual.jsp>

The Apache Tomcat version 5.5 can be downloaded from: <http://tomcat.apache.org/download-55.cgi#5.5.25>

The QuizMaster application is a Java Servlet web application that is executed in the Apache Tomcat Servlet container. It is deployed in the web application archive Quiz.war.

With Apache Tomcat running copy the Quiz.war file into Tomcat's webapps directory.

The webapps directory is typically found at

[PROGRAM FILES]\Apache Software Foundation\Tomcat[version]\webapps

You shall now see that a folder named "Quiz" appears inside the webapps folder.

You are now ready to configure the QuizMaster application.

### 4.2 Running the Server

The application will be running whenever Apache Tomcat is running. Restarting Tomcat will restart the application.

The URL of the Servlet will be similar to the following.

<http://localhost:8080/Quiz/Quiz>

### 4.3 Configuring the OpenStage IP Phone

The following section explains how to configure an OpenStage IP Phone to run the QuizMaster Application.



Pressing the **Display Application/Service Menu** key displays the application menu.

If the "Menu" tab is not selected press **Display Application/Service Menu** again.

Select the **Admin** option; you will be prompted to enter the Admin password.

From the list go into **Application** option and then select the **XML** option in order to configure XML application. From the next menu select **Add application**.

Enter the following details:

Display Name: **QuizMaster**

Application Name: **QuizMaster**

Server Address: **[The IP Address of the server]**

Server Port Number: **8080**

Protocol: **http**

Program Name on Server: **Quiz/Quiz**

Use Proxy: No

After entering the required details press **Save & exit**. This will add the **QuizMaster** application to list of Applications already configured or available. Refer to the user guide to start the application.

## 4.4 Using the Web Portal to configure the Quiz Database

QuizMaster includes a web portal designed to be used by an administrator who has access to the application server.

To access the web portal, open up a web browser such as Microsoft Internet Explorer and enter the address in the following format:

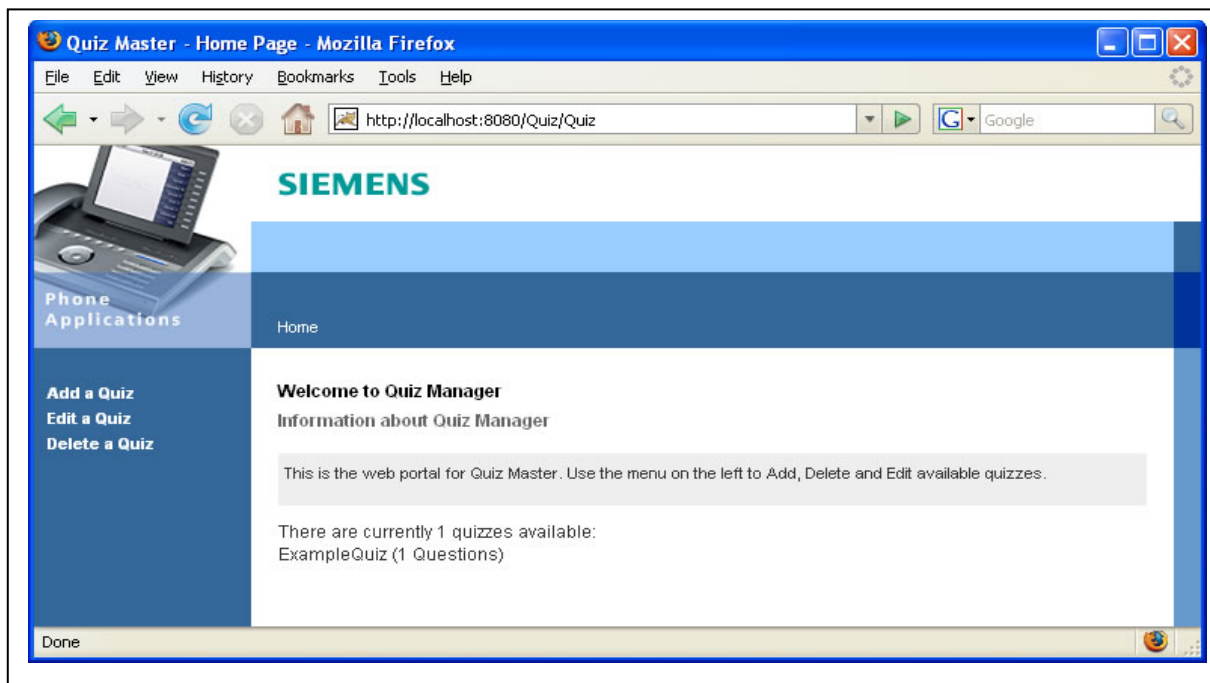
**http://serverIP:serverPort/Quiz/Quiz**

For example, if accessing the portal from the server machine and Tomcat has been configured to use the default port, you will need to enter:

**http://localhost:8080/Quiz/Quiz**

If this has been successful, you will be presented with the following page:

### 4.4.1 Home Page



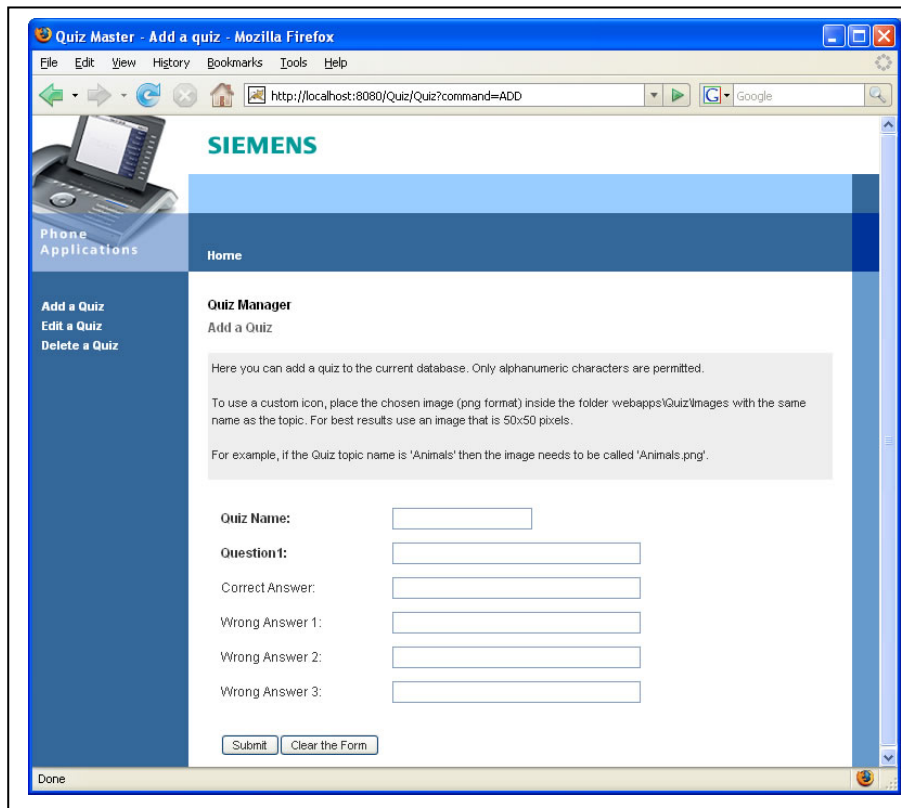
Here you are presented with a menu and a list of the current quiz topics in the database.

The menu has the following options:

- Add a Quiz
- Edit a Quiz
- Delete a Quiz

## 4.4.2 Add a Quiz

Choose **Add a Quiz** from the Home Page.



Using the **Add a Quiz** page you can create a new quiz topic, along with the first question, and add it to the database. The topic can only contain alphanumeric characters. The question and answers can only contain alphanumeric characters and spaces and are limited to 35 characters each.

Firstly, add a question followed by the correct answer. You then need to think of 3 **incorrect** answers to be used as other answer choices. The order in which you input the answers is not important as they will be displayed randomly to the phone user.

Once you have completed the first question click the **Submit** button. To clear the form and start again, click the **Clear** button.

After submitting the Quiz, you will be told if this was successful or not. If not successful, use your browsers back button to go back and amend the error. See section [5] for troubleshooting.

### 4.4.2.1 Using a custom Icon

A custom icon can be displayed next to the topic name on the Main Menu (see 4.2). The custom icon needs to be no more than 50x50 pixels in size and of type “png”. For better results, use an image with a transparent background. Once you have selected an image to use, you need to rename it to the same name as your quiz topic:

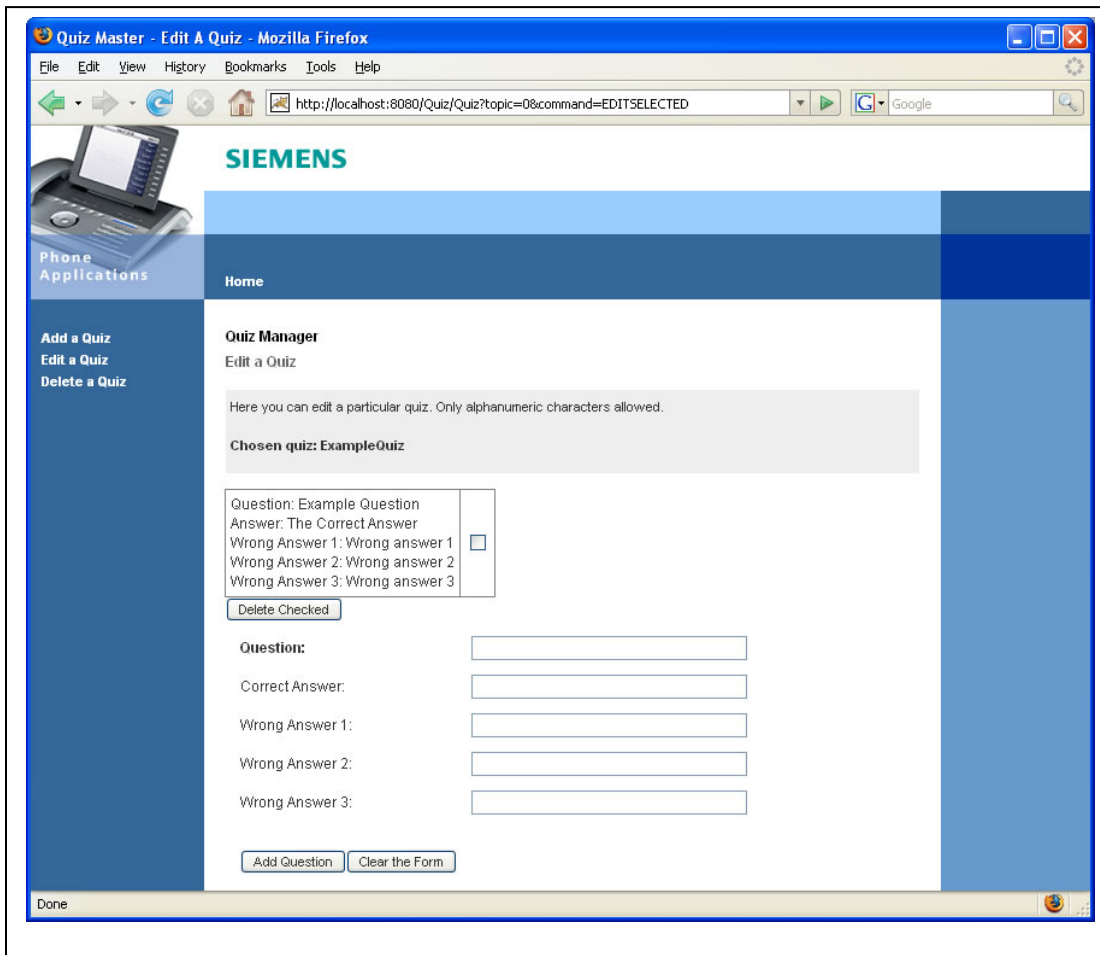
For example, if you have named your topic “Sports”, your image will need to be called “Sports.png”. It must be placed in,

C:\Program Files\Apache Software Foundation\Tomcat 6.0\webapps\Quiz\Images

Please Note: This path may vary slightly if Tomcat has not been installed with the default settings or the server is using a different operating system.

### 4.4.3 Edit a Quiz

Choose **Edit a Quiz** from the Home Page.



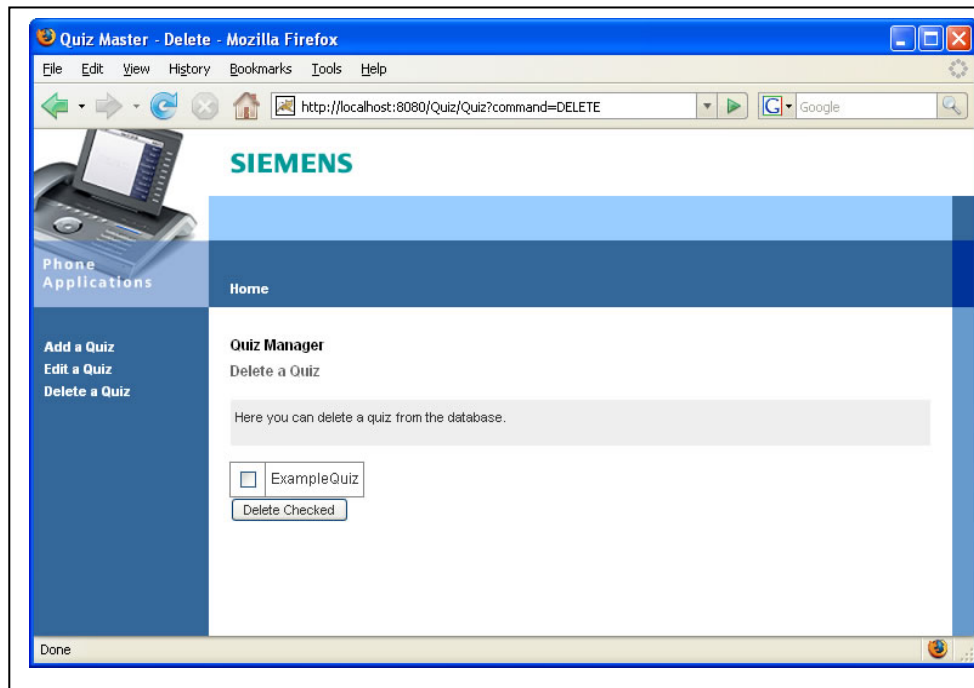
Select the quiz you wish to edit from the list and click **Submit**. You will now be presented with the screen shown above. To delete a particular question, check the box next to the question and click the **Delete Checked** button. More than one question can be deleted at a time.

To add a new question use the form at the bottom of the screen making sure you fill out all of the fields. Only alphanumeric characters and spaces are permitted. After filling out the form, click the **Add Question** button. You will then be notified if your question has been successfully added to the database.

Note that the edit process is irreversible. Once a quiz has been edited it is not possible to undo the changes.

#### 4.4.4 Delete a Quiz

Choose **Delete a Quiz** from the Home Page.



Check the box next to the question and click the **Delete Checked** button. You can select more than one quiz to delete at the same time. Once you have clicked the button you will be shown a confirmation message. For troubleshooting please refer to section [5].

Note that the delete process is irreversible. Once the **Delete Checked** button has been clicked it is not possible to undo the changes.

## 5. TROUBLESHOOTING

This section lists the typical issues you may encounter with the QuizMaster Application.

### 5.1 Phone Application FAQ

**Q. I've added new questions via the Web Portal but they are not appearing on the phone**

A. The QuizMaster application will need to be restarted to show any changes made to the database.

**Q. The questions are not being asked in the order I entered them into the database**

A. Question selection is performed randomly. At present this cannot be changed.

### 5.2 Web Portal FAQ

**Q. I cannot access the Web Portal**

A. Make sure you have typed in the URL correctly. It should be in this format:

`http://serverIP:serverPort/Quiz/Quiz`

For example:

`http://195.223.221.5:8080/Quiz/Quiz`

There is no final slash. The ServerIP can be replaced with hostname.

**Q. I receive an error message: Quiz cannot be added.**

A. Make sure that a quiz with the same topic name does not already exist. Make sure that all fields have been filled in and only contain alphanumeric characters.

**Q. There are no quizzes on the Home Page**

A. There are probably no quizzes in the database. If you add one using the *Add a Quiz* link then it should show up on the main page. If you cannot do this there may be a problem with the database connection. Make sure that Quiz.mdb is in the correct folder:

`C:\Program Files\Apache Software Foundation\Tomcat 6.0\webapps\Quiz\Database`

- End of Document -