



Email Engine Requirements Specification

1. Scope

1.1 Overview

The Email Engine component provides basic and advanced email functionality through Java API's. It is not a GUI-based component such as Outlook Express or Yahoo Mail that manages user email accounts. Rather, the Email Engine is a set of Java API's that enables a developer to send emails directly from application code. Logic Requirements

1.1.1 Original Requirements

- This component must meet all original Email Engine Requirements.

1.1.2 Message Priority

- This component must support message priority levels. The supported priority levels are:
 - Low Priority
 - Normal
 - High Priority

These priority levels will only be useful when the receiving email client is capable of parsing this information out.

- Since different mail readers use different representations of header settings, this should be configurable. Initial support should be for Microsoft Outlook mail reader.
- This should be done adding the following method to the TCSEmailMessage class
 - setPriority(int priority) where 1 == normal, 2 == low and 3 == high

1.2 Required Algorithms

None required.

1.3 Example of the Software Usage

The Email Engine is used from client applications that require a Java interface to send email messages. For example, many websites have registration pages. Upon submitting registration information, the website generates an automated email to let the user know that the registration was received and is currently being processed. It is this automated email that can be created using the Email Engine component.

1.4 Future Component Direction

None specified.

2. Interface Requirements

2.1.1 Graphical User Interface Requirements

None required.

2.1.2 External Interfaces

None required.



2.1.3 *Environment Requirements*

- Development language: Java1.4
- Compile target: Java1.2, Java1.3, Java1.4

2.1.4 *Package Structure*

com.topcoder.message.email

3. **Software Requirements**

3.1 **Administration Requirements**

3.1.1 *What elements of the application need to be configurable?*

Nothing additional.

3.2 **Technical Constraints**

3.2.1 *Are there particular frameworks or standards that are required?*

Must meet original Email Engines requirements.

3.2.2 *TopCoder Software Component Dependencies:*

Must meet original Email Engines requirements.

****Please review the [TopCoder Software component catalog](#) for existing components that can be used in the design.**

3.2.3 *Third Party Component, Library, or Product Dependencies:*

Must meet original Email Engines requirements.

3.2.4 *QA Environment:*

- Solaris 7
- RedHat Linux 7.1
- Windows 2000
- Windows 2003

3.3 **Required Documentation**

3.3.1 *Design Documentation*

- Use-Case Diagram
- Class Diagram
- Sequence Diagram
- Component Specification

3.3.2 *Help / User Documentation*

- Design documents must clearly define intended component usage in the 'Documentation' tab of Poseidon.