This Product Information Sheet describes the unidirectional integration between the IBM requirements management system Rational Doors (Doors) and the Hewlett Packard test management system Quality Center/ALM (QC) using the agosense.symphony integration platform.

**Goal**
To achieve an effective collaboration between developers using Doors and testers using QC, both software tools are linked via the agosense.symphony integration platform using adapters. The platform makes it possible to synchronise the requirements in Doors with QC in a process that can be individually configured. This in turn enables testers to create directly linked test cases for each requirement in QC.

**The Implementation Process**
The processes between the tools are specifically defined using a range of modules in the agosense.symphony interface, and the attributes to be transferred from Doors to QC are linked via a mapping module.

The synchronisation process can be started manually by the user, or the start may be automated. The times or events to trigger the synchronisation process are defined in the scheduling module.

The process checks that the fields for each individual requirement can be transferred from Doors to QC and replaces any data that cannot be read by QC (for example HTML tags).

The process also checks whether the data has been changed since the last transfer using an algorithm known as md5 checksum. Only requirements that have been changed are transferred to QC, making the process more efficient.

Should an error occur during the synchronisation, the process is stopped and the error is documented in the agosense.symphony reporting module. There, the user can identify the problem and then restart the process.

**Figure 1** shows the schematic overview of the integration between the two tools. Requirements are transferred from IBM Rational Doors via the agosense.symphony platform to HP QC/ALM. Firstly, the requirements are placed into a specific hierarchy, and saved in a defined Location A. The synchronisation processes are modelled in the agosense.symphony module, and the automated transfer process is configured. The data is then copied in exact order in the requirements area of QC and saved in a defined Folder B. Test cases linked to each individual requirement can then be created within QC.

**Advantages & Uses**
- Automated synchronisation of requirements from a specifically defined folder A in Doors to a specifically defined folder B in QC
- Transfer of the exact hierarchy from Doors to QC.
- Transfer of attachments to QC, including pictures, tables, OLE objects etc.
- Transfer of Umlauts and special characters to QC

Testers work continuously with their own software tools and create test cases in QC with a direct link to specific requirements

Use of checksum ensures more effective synchronisation process

**The Synchronisation Process**
The following screenshots provide a simple overview of the process.

**Screenshot 1** shows the Doors interface with requirements in individual hierarchy, in defined Ordner A.

**Screenshot 2** shows the mapping module in the symphony interface. The attributes to be transferred from Doors to QC are transferred via the defined Ordner B.

**Screenshot 3** shows the reporting module where the processes - both successful and those where an error occurred - are documented individually.

**Screenshot Nr. 4** shows the successfully synchronised requirements in HP QC - in the same hierarchy and in a specifically defined folder B.
**Integration with agosense.symphony**

**IBM Rational Doors - HP Quality Center**

**Screenshot 5** shows that attachments such as pictures, tables etc. as well as special characters and Umlauts have also been successfully transferred to QC.

**Screenshot 6** shows the end of the process where testers can create test cases that are directly linked to each requirements. This means that testers can work consistently with the one software tool, without having to change interfaces.