Market Requirements Document

Feature Name: Cloud Deployed Services

Version: 2 Date: 05/22/08.

Submitted By: Leon Guzenda

Description of the Problem

Demonstrating and evaluating Objectivity/DB features and applications currently requires an installation of the product on an Objectivity or prospect's machine and network. This requires the installation of Objectivity/DB on a compatible Operating System along with standard tool (compilers etc.) versions. In some cases we have had to build Tier 2 or 3 platform versions before an evaluation can start.

Description of the Requested Feature

Background

The latest incarnation of grid and Software as a Service (SaaS) computing is the provision of complete computing fabrics that are available across the Internet. Examples include Amazon Elastic Compute Cloud (Amazon EC2), the IBM-Google Cloud, 3-Tera and LiveMesh. The services typically include at least the capabilities shown in Figure 1.

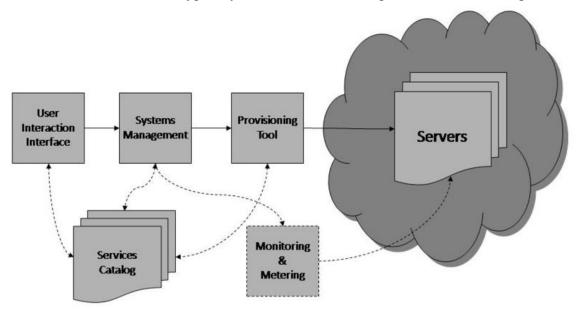


Figure 1 - Typical Cloud Services. (Source: Wikipedia).

Requested Features

- 1. Demonstration applications, such as Rental Fleet and NetElem, available to users on the Amazon Elastic Compute Cloud (Amazon EC2).
- **2.** Evaluation software, equivalent to the current trial download, that can be run on Amazon EC2.

Part of an existing feature or does it require another feature, if so, which one?

• This is an additional packaging option. It should not impact the standard product but it may need new license terms or enforcement.

How is this problem being solved now, and why isn't that acceptable?

We have to demonstrate Objectivity/DB running on laptops (generally), or the user has to provision a compatible hardware, operating system and tools environment and then download and install Objectivity/DB. Evaluations are often delayed because of problems with their environment.

What languages must support this capability?

Java, C++ and (eventually) C#.

Which platforms must be supported?

Amazon Elastic Compute Cloud.

Do any competitors already have this feature?

Yes – Elastra and Vertica.

Customers who require this feature

Evaluators.

Revenue at risk, or which could be won

This will make it easier for evaluators to install and evaluate our product, which should shorten the sales cycle.

When is this required?

• Release 10.1, but it could use any stable platform.

Additional Notes

- 1. The licensing and charging arrangements need to be investigated. Ideally, we would host and pay for our own demonstration images and usage, but evaluators would be able to start and pay for their own evaluation instances and usage.
- 2. C# and C++ evaluators will need access to Visual Studio. The technical and licensing arrangements need to be investigated.
- 3. Amazon EC2 uses Xen virtualization. According to Wikipedia "Several modified Unix-like operating systems may be employed as guest operating systems. On certain hardware, as of Xen version 3.0, unmodified versions of Microsoft Windows and other proprietary operating systems can also be used as guests if the CPU supports Intel VT or AMD V technologies."
- 4. We could deploy the capability in stages:
 - a) Java demonstration applications.
 - b) C++ demonstration applications.
 - c) Java evaluation service.
 - d) C# demonstration applications.
 - e) C++ and C# evaluation service.
- 5. The demonstration applications could be maintained by the SEs initially.
- 6. We may provide similar packaging for other cloud environments in the future.
- 7. We will also need:
 - Marketing collateral and prominent placement on the main web site.
 - System Engineers' training material (probably hosted on ObjyWiki).
 - Additional Quality Assurance material to verify the platform.

Useful Links

- <u>Cloud Computing</u> Wikipedia article.
- <u>Amazon Elastic Compute Cloud</u> Amazon EC2.
- <u>Amazon Compute Cloud</u> Wikipedia article.

• <u>Vertica deploys on Amazon EC2</u> – PC Week article