BMC Software Inc.

Technical Disclosure Publication Document

Brad Corbin & James Perry

Rapid Solution Deployment

Posted: July 2009

Overview
Traditionally, conducting Proof of Concepts of software installations at customer sites
has been very time consuming and expensive. In some cases the first five days of the
engagement are used just to build the environment and install software. All this time is
generally viewed by the customer as non-value-added time. The process described below
solves this issue and dramatically lowers the time of installation. In 2 to 4 hours
depending on customer requirements, a large comprehensive solution under Business
Service Management ("BSM") can be up and running in a customer environment. This
process allows the field consultant or partner to move to the data-integration stage much
faster than if the process is not used. The goal is to reduce the amount of time spent at
customer sites in non-value-adding tasks. This is possible to do at virtually no cost to the
software installer or the customer.

Background

Delivering a Proof of Concept of large comprehensive solutions can be very time
consuming, involving multiple resources, and thus very expensive. Much of the time is
spent installing the product(s) in the customer environment. It may take 2 to 5 days or
more to get a solution installed on customer hardware. Portability options are limited for
solutions that are IP/MAC dependent

Solution

The solution is: Install and configure a fully-functional environment on an in-house
server. Encapsulate the network environment using an open source router/firewall.
Utilizing Network Address Translation (NAT), the router allows the installer to maintain
the same Internet Protocol /Media Access Control (MAC) address for dependant
applications. Create an internal Local Area Network (LAN) that maintains the same
Internet Protocol (IP) address on each machine. This permits the installer (working with
the customer) to decide what type of connectivity is needed and to configure it prior to
going onsite. There are three types of connectivity. The first option, using Domain
Name System (DNS) servers and NAT 1:1, allows the environment to be seen as any
other machine on the network. With the second option, the client machine's host file is
updated to include the Virtual IPs (VIPs) that correspond to the virtual machines located
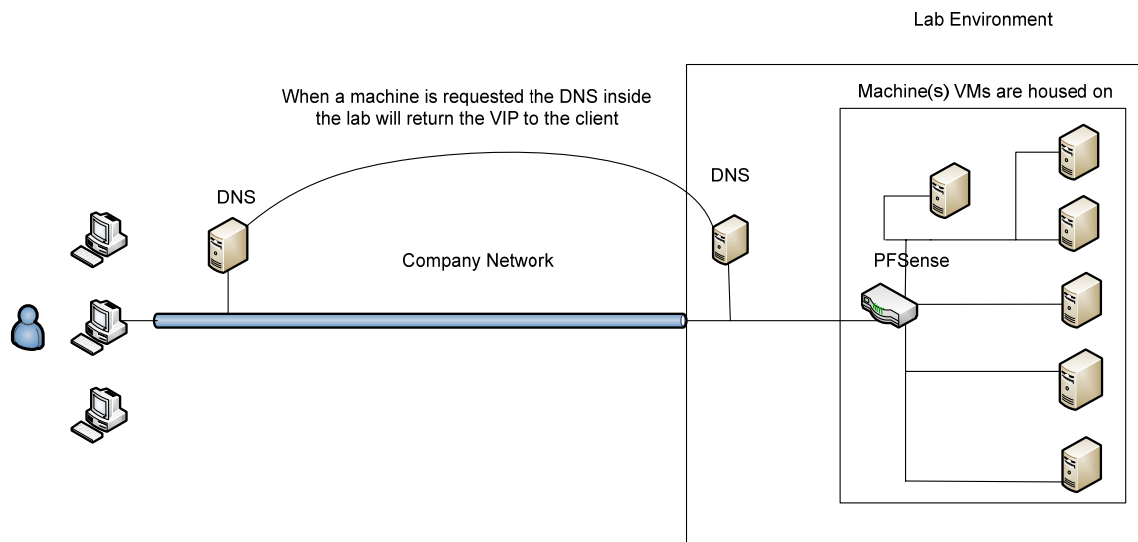
on the internal LAN. This allows the updated machines to see the virtual environment.
The third option uses port forwarding and Remote Desktop Protocol (RDP). This option
is best when DNS and host file modifications are not allowed. The fully-built and
configured environment is then transferred to a portable hard drive and transported to the
customer site. The environment can then be transferred to customer hardware (a Server).
Once transferred, it can be powered up and available for use in a matter of minutes.

Drawings
There are several embodiments, each providing a different option for connectivity; one
embodiment of this invention is shown below graphically detailing how a deployed and
configured environment would appear. The diagram below shows the internal LAN and
how the router and DNS servers are used in this embodiment.

Connection Option: NAT 1:1 using DNS forwarders

Connection Option A: NAT 1:1 using DNS forwarders

Lab Environment

Machine(s) VMs are housed on

When a machine is requested the DNS inside
the lab will return the VIP to the client

DNS

DNS

Company Network

PFSense

Reason to choose this option:
- ✔ The solution will appear as any other machine on the network.