



# **RADIOLOGY SERVICES COMPANY**

## **PROJECT SUMMARY**

Prepared Shunra Sales, October 2009



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Note: *Customer* will be referenced throughout the project summary in replace of the Radiology Services Company name for disclosure reasons, as well replacement of the Test Environment name. The Test environment will be referred to as *Vendor A*, the independent provider of imaging IT solutions.

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## EXECUTIVE SUMMARY

A Radiology Services Company has communicated to Shunra Software LTD. that their business involves getting medical images (DICOM format) from hospitals in the US to radiologists all around the world. This is done so that a radiologist can read a study when the hospital may not have their own radiologist immediately available. Typically, this means doing a lot of studies at night, and often involves many trauma cases (e.g. car accidents, etc.). As a result, timing is critical. (Customer) must be able to get a preliminary report back to the hospital within 20 minutes

Currently, (Customer) sends images to their radiologists around the world through a complex system they have developed (of software, multi-link network connections, VPNs, etc.) which involves tracking where the radiologist is and manually “pushing” images to the correct radiologist.

(Customer) is looking to use the (VENDOR A) to replace parts of that system. The (VENDOR A) has a client viewer application which can be run on their radiologists’ workstations. The Client Viewer application communicates with the (VENDOR A) server to “pull” images in a compressed format. Since (Customer) knows an on-demand image-by-image “pull” won’t be sufficient to support their radiologists’ workflow when scrolling rapidly through many studies.

## PROJECT OBJECTIVES

- Profile and evaluate the (VENDOR A) Viewer software to give (Customer) data to address potential performance bottlenecks.
- Implement Shunra VE Network Catcher to give (Customer) 24x7 metrics of various radiologists existing WAN connections and assist in validating data previously manually collected by (Customer).
- Construct emulation scenarios that will allow (Customer) to test the (VENDOR A) Viewer software under various WAN conditions to better accurately gauge performance.
- Combining Shunra VE Modeler and VE Network Catcher, give (Customer) the ability to replay point-in-time WAN conditions so that they can replicate peak radiologist work collected from their current system and replay that activity in the lab. This Shunra only ability will allow them to receive a true application to application comparison for evaluation.



## PROJECT HIGHLIGHTS

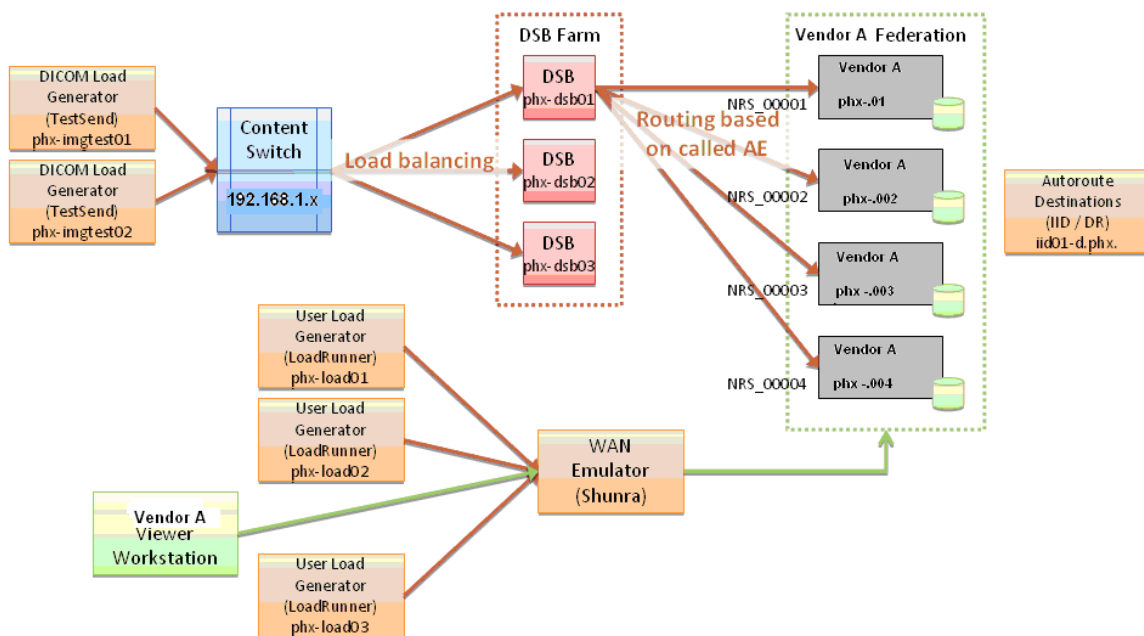
- Profile testing with Shunra VE Analyzer revealed functionality defects in the (VENDOR A) Viewer software that were addressed by (VENDOR A). (VENDOR A) also released a new version of their viewer during the engagement which allowed us to profile both versions and provide a performance comparison to (Customer).
  - Due to the (Customer) / (VENDOR A) relationship, Shunra was introduced to (VENDOR A) as a potential customer. Shunra is engaged with (VENDOR A), while data sharing of emulation results are shared to (VENDOR A) by (Customer).
- Provided to (Customer) that random pings over a WAN link were not an accurate long term profile and they needed Shunra VE Network Catcher.
  - They were blown away by the ability for Shunra to replay a WAN connection for emulation. Without this ability, (Customer) would not have been able to accurately re-create their top radiologist performance testing.
  - (Customer) is currently pitching the tool to their operations group production use. This will give (Customer) access to larger budget money for technology purchase.
- (Customer) also sees potential in VE Desktop for HP Software for their development and testing people. This opportunity will also be pursued.
- Top Radiologist Performance Testing conducted by (Customer) provided feedback that preliminary results show the (VENDOR A) system could support most of their top performing radiologists and validated their partnership with (VENDOR A).

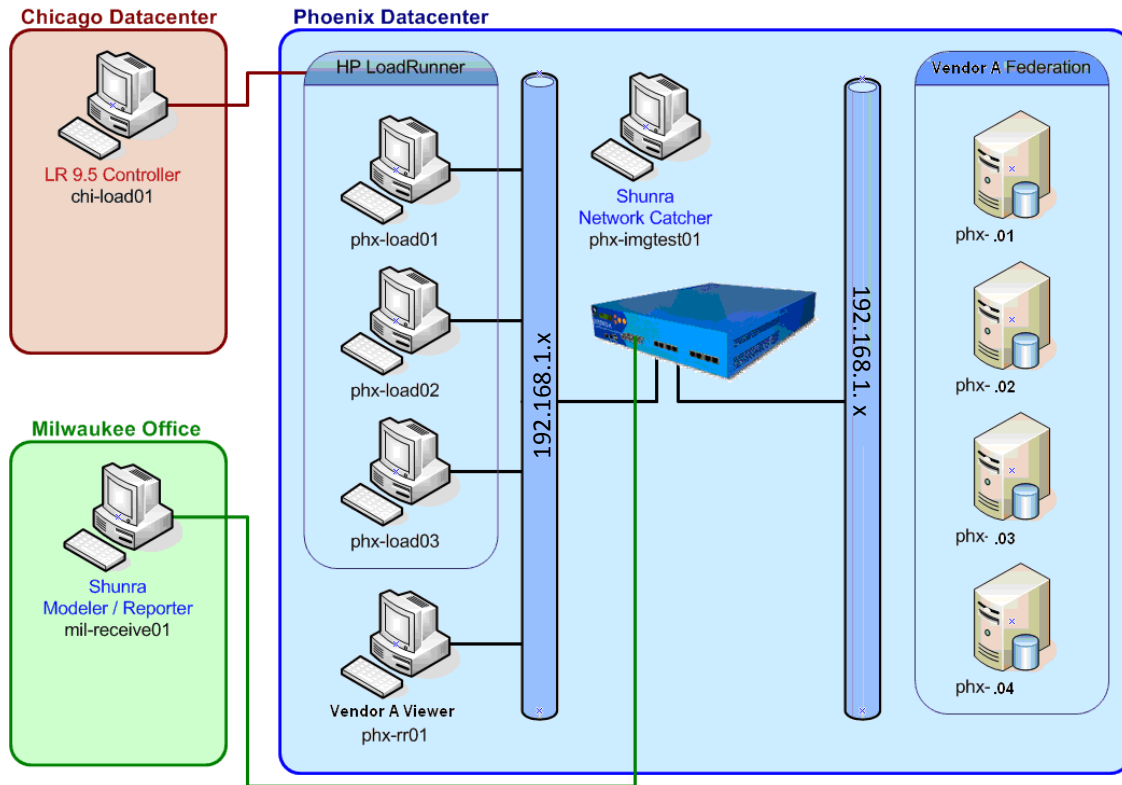
## ENVIRONMENT TOPOLOGY & SETUP

For the engagement, Shunra deployed a STN class appliance to the (Customer) data center in Phoenix, AZ datacenter in router mode. This configuration allowed (Customer) & Shunra to test from the (Customer) Milwaukee office without the need to be at the Phoenix datacenter.

## ENVIRONMENT TOPOLOGY

### (CUSTOMER) PROVIDED (VENDOR A) TEST ENVIRONMENT





SHUNRA DOCUMENTED (VENDOR A) TEST ENVIRONMENT