



Sun Ray @ Home (SaRAH): A Sun IT Project Case Study

Advantages of the Proposed Solution

The Sun Ray @ Home solution provides the following advantages over current workstation or PC-based solutions:

- Sun Ray appliances are comparatively low cost.
- Security risks are limited due to Sun Ray's stateless environment and use of encrypted VPN connections.
- Access control and virus protection occur on shared Sun Ray servers inside the secured corporate network.
- One set of applications and tools supports all users.
- Maintenance and support costs are reduced due to the shared server resources and stateless clients.
- Training costs are reduced with the use of a single, consistent work environment.
- Session mobility allows workers to "lockscreen" their current work session at Sun and retrieve it at home using their SunBadge (Sun's internal Java smart card). The same can be used for moving between work sites within Sun.

The Sun Ray @ Home (SaRAH) Project

The Sun Ray @ Home project is being deployed in phases, with expected deliverables outlined below. The project is currently in the extended trial phase with an expected user population of 300 test users worldwide.

Phase 1 — Trial Phase (five months; started October 2003)

- Limited to 50 users, primarily the project team
- Test the proposed hardware and software configuration
- Limited support for users
- Develop best practices and documentation
- Dedicated Sun Ray servers for project

Phase 2 — Extended Trial (three-to-six months; started July 2004)

- 300 additional users worldwide (200 US, 50 EMEA, 50 APAC)
- Expanded support for users
- Testing of remote printing solutions
- Test documentation and support practices
- Use of current production Sun Ray servers

Phase 3 — Pilot (six months; projected to start January 2005)

- 1000 additional users worldwide
- Ordering of solution via normal capital processes
- Printing solution defined and available
- Full support available via normal support structure
- Use of production Sun Ray server infrastructure worldwide

Phase 4 — Production (start date TBD)

- Solution becomes a standard offering for work-from-home employees

The current Sun Ray @ Home end-user package consists of several hardware components, some supplied by Sun and some already existing at the user's home office. See Figure 1.

- A) Sun Ray thin-client appliance (Sun provided)
- B) Cisco VPN router (currently model 831 or SOHO91, Sun provided)
- C) Home router (optional, end-user provided)
- D) Cable/DSL modem (end-user provided)

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- E) Print server for USB printer (optional, Sun provided)
- F) USB printer (optional, Sun or end-user provided)
- G) Monitor for Sun Ray (end-user provided)

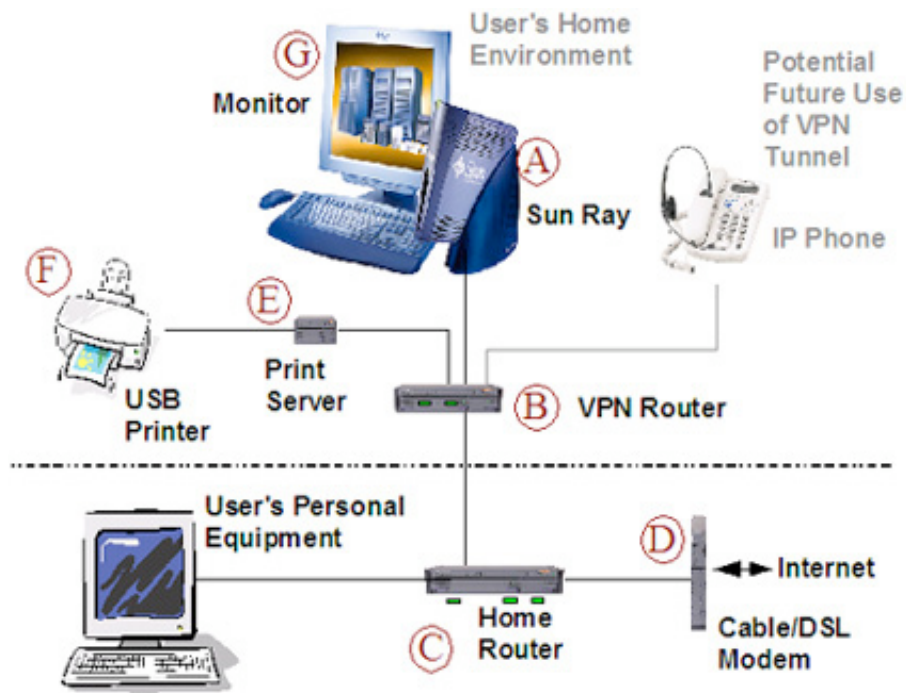


Figure 1: Sun Ray @ Home Package

The combination of these components provides home-office workers with a complete solution that delivers the same work environment at home that is available in their office at Sun; the same e-mail, calendar, office tools, internal Sun applications, and complete access to all of their work files with no change in the access method or the tools used.

This solution allows home-based workers to initiate work at their Sun office, then go home and continue where they left off, seamlessly, and without downloading or converting files for use with other tools.

Figure 2 displays the current architecture of the Sun Ray @ Home project for Phase 2, the extended trial. Trial users are connecting via dedicated VPN routers into Sun's wide-area network (SWAN) using their Cisco routers from home.

Once validated by the VPN routers, they are directed to a geographically local Sun Ray server that provides them with their office environment. This office environment is the exact same Sun Ray session they would be using when they left their Sun office.

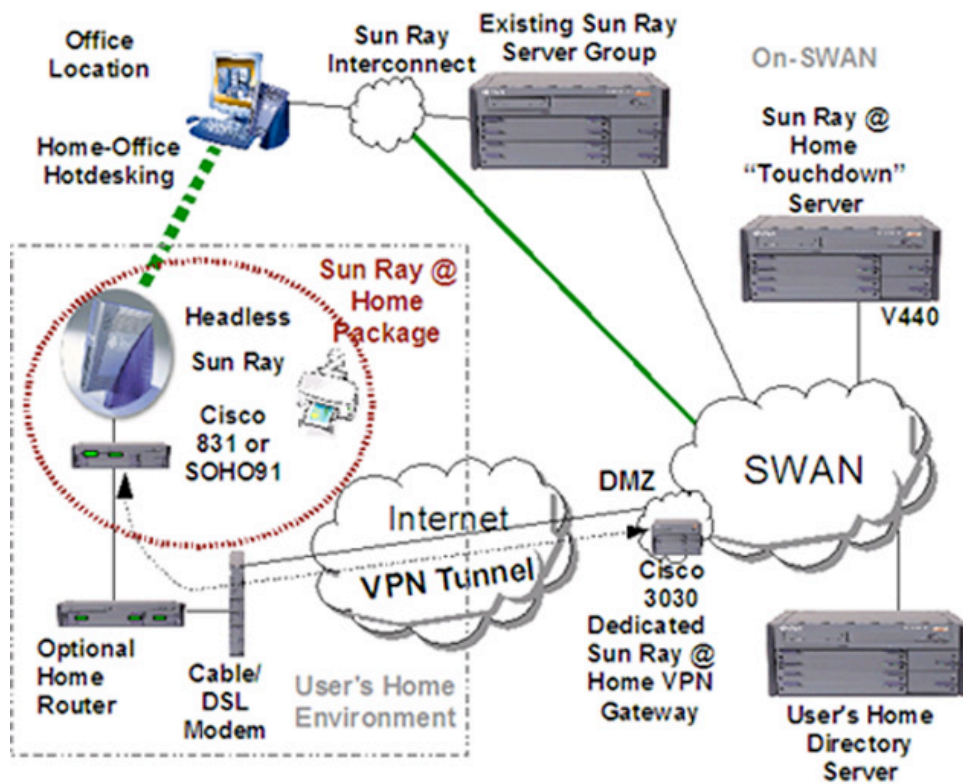


Figure 2: Current Deployment Architecture

Thus far, feedback from the trial users has been very favorable. Most users have reported performance at almost the same or equivalent to the performance of their Sun Ray at their Sun office.

The installation process is simple; it takes under 30 minutes for most users to unpack their equipment and have it up and running normally. Because the extended-trial users range from very technical users (the project team) to everyday users (executives and their administrators), the Sun Ray @ Home team expects to receive excellent feedback on features and processes that work and which need to be improved.

At this point in the trial, the Sun Ray @ Home trial users are very excited about having a consistent desktop environment to use at work and at home.

The Sun Ray @ Home team is expecting to finalize the end-user package during this phase of the project and map out all of the support procedures required for the next phase of the project. All documentation should be finalized and the final printing solution determined by the end of this project phase.

Standards for ordering the Sun Ray @ Home package and the return of existing workstations and PC solutions will be determined and procedures put into place by the end of this phase as well.

Future Directions

During the first two phases of this project, several suggestions for enhancements to the Sun Ray thin-client appliances and supporting software have been suggested, as have potential future services to be offered by the Sun Ray @ Home project. Currently, these are only suggestions for future enhancements, and Sun IT has made no commitment to make any of these changes. The suggestions include:

- Build the VPN router into the Sun Ray appliance itself.
- Build support for USB printers into the Sun Ray appliance and include necessary printer drivers.
- Enhance security to support Sun Ray users from non-Sun sites.
- Provide the ability to connect to any Sun Ray server worldwide and allow users' sessions to follow them.
- Support larger deployments as the program grows.

Summary

Providing Sun employees with the Sun Ray @ Home option is a win for Sun in terms of cost savings and increased employee satisfaction, and is a win for the employees with ease of use and increased flexibility for work environments.

Sun IT and Sun's remote workforce are looking forward to the continuation and expansion of this project to enhance the quality of life at Sun.

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