

Workers' Compensation Court
Shared Services Project Sponsored by WCC
VMWare ACE Manager Evaluation Software
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Indoctrination: Shared Services Project was introduced by Randy Ceerle, WCC IT Manager. Active participants included Office of Chief Information Officer - Server Support Team and WCC Information Technology. Evaluation software "VMWare ACE Manager" was selected as the software to test.

Objective: WCC needs the ability to manage, update, test and deploy software tools utilized by developer staff. These software tools potentially need to run on multiple operating systems (Win2K, WinXP, Win2000AdvSrv, Win2003AdvSrv).

Project History: Meetings were scheduled and attended by the active participants. Evaluation software "VMWare ACE Manager" was downloaded and installed on host platforms.

Plans were discussed and agreed upon by the active participants to use evaluation software to develop "distinct" virtual environments. Each distinct virtual environment then would be "passed off" and executed in different running instances of VMWare ACE Manager.

Key areas **tested and implemented** with VMWare ACE Manager are listed below.

1. Created isolated network virtual environment using VMWare ACE Manager which simulated services and tools needed by a web developer. Services and tools included and installed in virtual environment were Apache Web Server version 2.0.55, PHP version 5.1.2 and Oracle Enterprise Database version 10.2g. This full-blown web development environment was chosen to "push" VMWare ACE Manager software to the limits. In reality, this type of environment may never be implemented in real case scenarios, but this scenario was used to try and "break" evaluation software.
2. Validated isolated network virtual environment was communicating and receiving timely updates and patches from Symantec Enterprise Antivirus Server, Windows Software Update Server (WSUS), Active Directory Group Policy Objects, Domain login scripts.
3. Configured VMWare ACE Manager to use Active Directory Group Policy Objects and Security Groups.

Key areas **not tested** due to expiration of 30 day software evaluation time period.

1. Deploy isolated network virtual environment to specific domain computers using ACE Manager and Active Directory Group Policy Objects (software integrates with Active Directory)

Recommendations: VMWare ACE Manager Software **will fulfill WCC objectives** in managing developer tools within multiple different operating systems. VMWare ACE Manager software strengths are **security**, ability to integrate into existing Active Directory environments to manage virtual instance updates, expiration, network configurations, deployment, etc...

Careful consideration and analysis should be performed prior to implementation. Below are some key areas to consider.

- 1) Separate hard drives should be installed on client computers (at a minimum, one hard drive for running host operating system, one hard drive for running virtual software instances).
- 2) Physical RAM installed on client computers (at a minimum, 2 gb).
- 3) Analysis performed on required Server resources needed (Server is where VMWare ACE Manager Software is installed).

Final Thoughts: VMWare ACE Manager software is limited to whatever physical resources are available to be consumed on client or server computers. For example, services and tools which are currently running in WCC's domain network environment on dedicated physical servers or computers, can be configured, setup, and run under virtual instances. Software licensing should be taken into consideration when planning to use VMWare ACE Manager Software. Each virtual instance being run on client computers, requires additional valid operating system licenses, application licenses (i.e., Notes), etc...