

ISR's Viability as an SOE System

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1. Push new patches and updates seamlessly to users

- Vision: Patching of OS + Applications should not depend on users or the application itself
- IT support teams should be able to patch once and deploy everywhere
- ISR does not currently support this but it can be easily added as follows

1. Push new patches and updates seamlessly to users (2)

- Create a gold OS image (this is read only)
- All user changes go into a writable network directory (user files, documents, user preferences, etc.)
 - Might be managed by ISR as a separate disk image
- OS updates are made to the gold OS image
 - Everyone gets the updates next time they checkout the image (can enforce checkouts as well)

1. Push new patches and updates seamlessly to users (3)

- Use thinstall-type solutions for applications
 - Patch the thinstall application
 - Everyone gets the patched version next time
 - User preferences and changes are not touched

1. Push new patches and updates seamlessly to users (4)

- Pros
 - Allows IT admin complete control over the OS
 - It is read-only
 - Applications are patched independently
 - No messy OS/application interactions
 - Can maintain multiple versions of applications if needed
- Cons
 - Users lose flexibility
 - Can only modify files in their sandboxes

2. Dynamic application license brokering

- Vision: company uses multiple software that have site licenses. They want to be able to dynamically deploy these licenses without needing too much maintenance infrastructure
- This can be achieved with ISR + thinstall
 - Central license server is checked before thinstalled application is deployed (licenses are updated dynamically)
 - Gold ISR OS image has OS-specific modules to validate and verifying licensing (even when disconnected)

3. Support multiple user roles easily and flexibly

- Vision: Different users in a company need different access to their machines
 - E.g., tellers need just read access, faculty need complete access
- This is tricky.
- ISR can support any kind of role system
 - *but* what type of roles need to be supported must be clearly stated
 - ISR team is willing to work with us on supporting clear usage scenarios

4. Deploy new enterprise applications

- Vision: company decides that everyone should now use application X. It should be easy for application X to “magically” show up on every computer.
- ISR + Thinstall will deliver this
 - Update the gold ISR image with a pointer to the new application
 - Thinstall the new application
 - non-thinstalled applications can also be supported by ISR
 - Harder. Requires keeping full application install logs

5. Seamless desktop & work mobility

- Vision: Users can access their work desktop on any machine, anywhere
- This is the ISR vision
- Fully supported by ISR

6. Reliability & Ability to self-fix

- Vision: Users are able to retrieve backups of their system and be able to automatically go back in time to known good versions
- ISR status: ISR supports this manually currently
 - Users can manually check in anytime they want
 - Server already does automatic checkpointing
 - Making it more automatic is easy though
 - Some changes to the client
 - GUI tools (may not be done by the ISR team)
 - Scripts to regularly commit VMs for backup reasons

Scenario Feasibility

Scenario	ISR	Feasible?
1. Updates	ISR team is willing to support this. Will require creating a read-only gold image with use of thinstall type solutions & proper user sandboxing	Very promising ✓✓
2. Licenses	Can be supported with guest OS patches + a thinstall-type solution	Very promising ✓✓
3. Roles	ISR team is willing to support this. But they need clear usage scenarios. We might need to provide assistance to develop GUI tools for 1-4	Yes. With proper usage specifications ✓
4. App Deploy	Can be supported with ISR gold image + thinstall	Very promising ✓✓
5. Mobility	Already Supported	✓✓✓✓
6. Recovery	Small Patches needed to ISR client.	✓✓✓✓