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Simplifying Feature Enablement With Keyless Licensing

The Problem(s) with License Keys



- Typical scenario:
 - System Admin is deploying a new SFHA host
 - SA has taken care of the hardware setup, OS, patches and SFHA Bits
 - To make the bits functional, SA needs a valid SFHA **license key**...
- Where's the license key?
 - Business owner drew down the license and got the key
 - Business owner forwarded the email with the key
 - But the SA never received the email...
- SA is on a tight schedule and needs to go live asap
 - SA calls support
 - SA calls his account team
 - Both support and the account team scramble, they call PM
 - SA gets a temp key to get the system up and running...
- That temp key will pose a significant risk to production applications

SFHA Customer Requirements

- Make it simpler to get the product up and running
- Make it simpler to report on what is deployed in the environment
- Adopting change should be an option, not a requirement

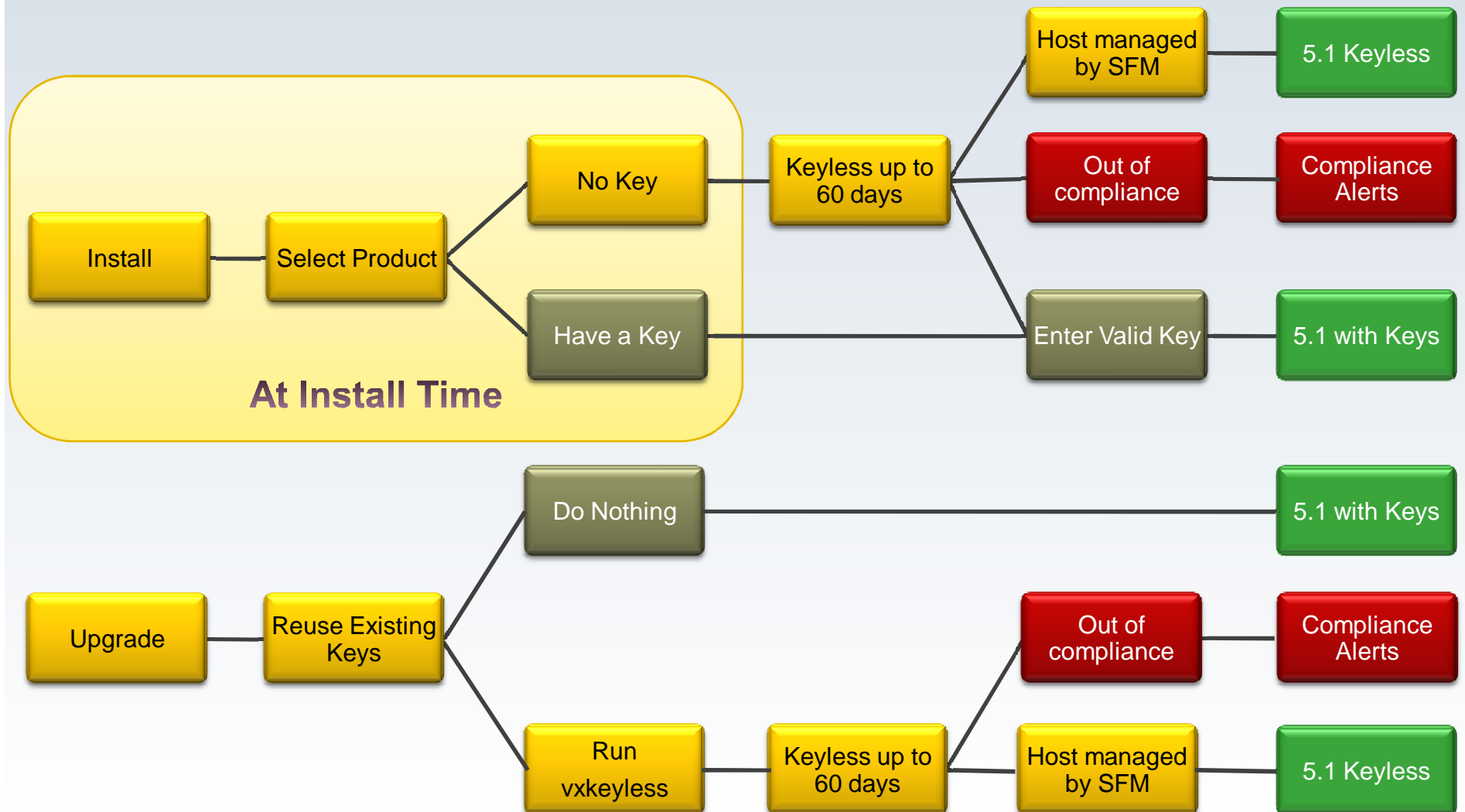
SFHA 5.1 Makes License Keys Optional at Install

- Product is fully functional post-install, even without a license key
- User has 60 days post install to either add a key or go keyless
- Temp Keys will no longer be needed as stop-gap solutions

Keyless Licensing Requires Storage Foundation Manager

- SFHA 5.1 is keyless by default
- SFM is required for a host to be keyless for more than 60 days
- The SFM tie-in provides real-time visibility in SFHA 5.1 estate

Key Considerations At Install and Upgrade



Keyless or not, a host **MUST** be entitled to run SFHA

- After 60 days, WARNING messages every 4 hours in syslog
 - Production functionality is NOT affected
- **vxkeyless** allows user to set and change product level
 - Set to desired level using keywords such as SFENT or SFHASTD
 - Display the level previously set
 - All changes are logged for future reference / audit
- Note that vxkeyless does not change the bits installed
- Storage Foundation Manager enables real-time visibility

Example Product Level Strings



| Level | Description |
|--------------------|--|
| SFBASIC | Storage Foundation Basic Edition |
| SFSTD | Storage Foundation Standard Edition |
| SFSTD_VVR | Storage Foundation Standard Edition with VVR |
| SFENT | Storage Foundation Enterprise Edition |
| SFENT_VVR | Storage Foundation Enterprise Edition with VVR |
| VCS | Cluster Server |
| VCS_GCO | Cluster Server with GCO option |
| SFHASTD | SF Standard Edition with Cluster Server |
| SFHASTD_VVR | SF Standard Edition with Cluster Server and VVR |
| SFHAENT | SF Enterprise Edition with Cluster Server |
| SFHAENT_VVR | SF Enterprise Edition with Cluster Server and VVR |
| SFHAENT_GCO | SF Enterprise Edition with Cluster Server and GCO |
| SFHAENT_VVR_GCO | SF Enterprise Edition with Cluster Server and VVR & GCO |
| SFCFSENT | SF Cluster File System Enterprise Edition |
| SFCFSENT_VVR | SF Cluster File System Enterprise Edition with VVR feature |
| SFCFSHAENT | SF Cluster File System Enterprise Edition with Cluster Server |
| SFCFSHAENT_VVR | SF Cluster File System Enterprise Edition with Cluster Server and VVR |
| SFCFSHAENT_VVR_GCO | SF Cluster File System Enterprise Edition with Cluster Server and VVR & GCO |
| SFCFSRACENT | SF Cluster File System for Oracle RAC Enterprise Edition (only Linux) |
| SFCFSRACENT_VVR | SF Cluster File System for Oracle RAC Enterprise Edition with VVR (only Linux) |
| SFRACENT | SF for Oracle Real Application Cluster Enterprise Edition |
| SFRACENT_VVR | SF for Oracle RAC Enterprise Edition with VVR |
| SFRACENT_GCO | SF for Oracle RAC Enterprise Edition with GCO |
| SFRACENT_VVR_GCO | SF for Oracle RAC Enterprise Edition with VVR & GCO |

Storage Foundation Manager License Deployment Reporting (LDR)



Get a quick synopsis of your SFHA estate

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Add-ons » Deployment Summary

Storage Foundation License Deployment Summary Options ▾

Summary | Product Inventory | Product-Tier Mapping | Tier-Host Mapping | Exceptions

Deployment Summary

Updated on Aug 12, 2009 2:34:35 PM [Refresh](#)

Summary by platform

| Platform | #Deployed | % |
|----------|-----------|--------|
| Solaris | 43 | 51.19% |
| HP-LUX | 0 | 0.00% |
| AIX | 1 | 1.19% |
| Linux | 35 | 41.67% |
| Windows | 5 | 5.95% |

Summary by product

| Product | #Deployed | % |
|-------------|-----------|--------|
| SF | 38 | 39.18% |
| SF CFS | 34 | 35.05% |
| DB Editions | 12 | 12.37% |
| Oracle RAC | 8 | 8.25% |
| VCS | 0 | 0.00% |
| VVR | 2 | 2.06% |
| SFW | 1 | 1.03% |

Summary by edition

| Edition | #Deployed | % |
|------------|-----------|--------|
| Basic | 0 | 0.00% |
| Standard | 19 | 18.45% |
| Enterprise | 81 | 78.64% |
| Others | 3 | 2.91% |

Summary by release

| Release | #Deployed | % |
|---------|-----------|--------|
| 4.0 | 23 | 20.91% |
| 4.1 | 11 | 10.00% |
| 4.2 | 1 | 0.91% |
| 4.3 | 0 | 0.00% |
| 5.0 | 50 | 45.45% |
| 5.1 | 21 | 19.09% |
| Others | 4 | 3.64% |

| Deployed Host Summary | |
|--------------------------------|----|
| Number of Hosts | 84 |
| Hosts having multiple licenses | 40 |
| Hosts having higher licenses | 26 |
| Hosts having invalid licenses | 17 |

| Deployed License Summary | |
|---------------------------|-----|
| Number of Licenses | 88 |
| Valid Licenses | 70 |
| Expired Licenses | 18 |
| Verification Needed | 37 |
| Total License Deployments | 167 |