

## Secure Linux Provisioning Server

### NDP Research – Tech Note

July 2012

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<b>Tech Note Number</b>	NDP-TN-108
<b>Problem</b>	Achieving a comprehensive yet secure network deployment solution for Red Hat Enterprise Linux (RHEL).
<b>Description</b>	NDP possesses the experience and personnel to provide rapid and comprehensive provisioning solutions for secure Linux installations. By using an original security approach to the common Kickstart and Cobbler packages multiple versions and distributions can be deployed into a DISA or DSS accredited network.
<b>Core Technology</b>	NDP solutions leverage advanced networking and software technology, including FOSS. The solution described utilizes Red Hat Enterprise Linux (RHEL) based platforms (such as RHEL, CentOS, or Scientific Linux version 6) along with Cobbler (optional). Cobbler is a web-based interface that eases the configuration of deployment images but is itself unnecessary to deploy hardened servers and workstations. All components except Cobbler are secured with custom Security Enhanced Linux (SELinux) policies (policies for Cobbler are under development) as well as guidance from the National Security Agency (NSA), Defense Information Systems Agency (DISA) and Defense Security Service (DSS) using original and innovative policies and techniques.
<b>Benefit</b>	Our customers see the operations and deployment of their core infrastructure and application tiers from a unified interface. Security policies are highly configurable via a novel set of ‘scriptlets’ which can be tailored as well as individually controlled on a site and even system basis. Our customers see a consistent, accredited provisioning process rather than accreditation ‘by system, on paper’.
<b>Market</b>	Our focus is on Defense and National Intelligence agencies with space-based assets, but the techniques and technologies apply in other sectors with stringent reliability, latency, and security requirements.
<b>Technology Readiness Level</b>	7. System prototype demonstration in an operational environment
<b>Keywords</b>	Cobbler, Apache, Cloud, Perl, RDBMS, Red Hat, RHEL, Fedora, CentOS, Scientific Linux, SELinux, MAC, CI, MLS, NSA, DISA, DSS, STIG, SRR, Gold Disk

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##### About NDP

NDP designs and deploys complex computer systems and networks. We also assure that these systems and networks can operate securely in cyberspace. By integrating sound net-centric designs into our customer systems, we enable them to gain a competitive advantage that translates to mission effectiveness. We primarily support DoD, Intel and Federal customers and currently expanding our offerings to the commercial and academic markets. We are a customer-centric, technology-centric and people-centric company.

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