The global leader in cryptographic key management.

Chrysalis-ITS

The World's Most Trusted Hardware Security Products

- Thousands of systems worldwide since 1994
- The only hardware security vendor in the world to achieve both FIPS and Common Criteria certification
- Trusted by over 200 blue chip customers in 50+ countries
- Used by 84% of Fortune 500 deploying PKI

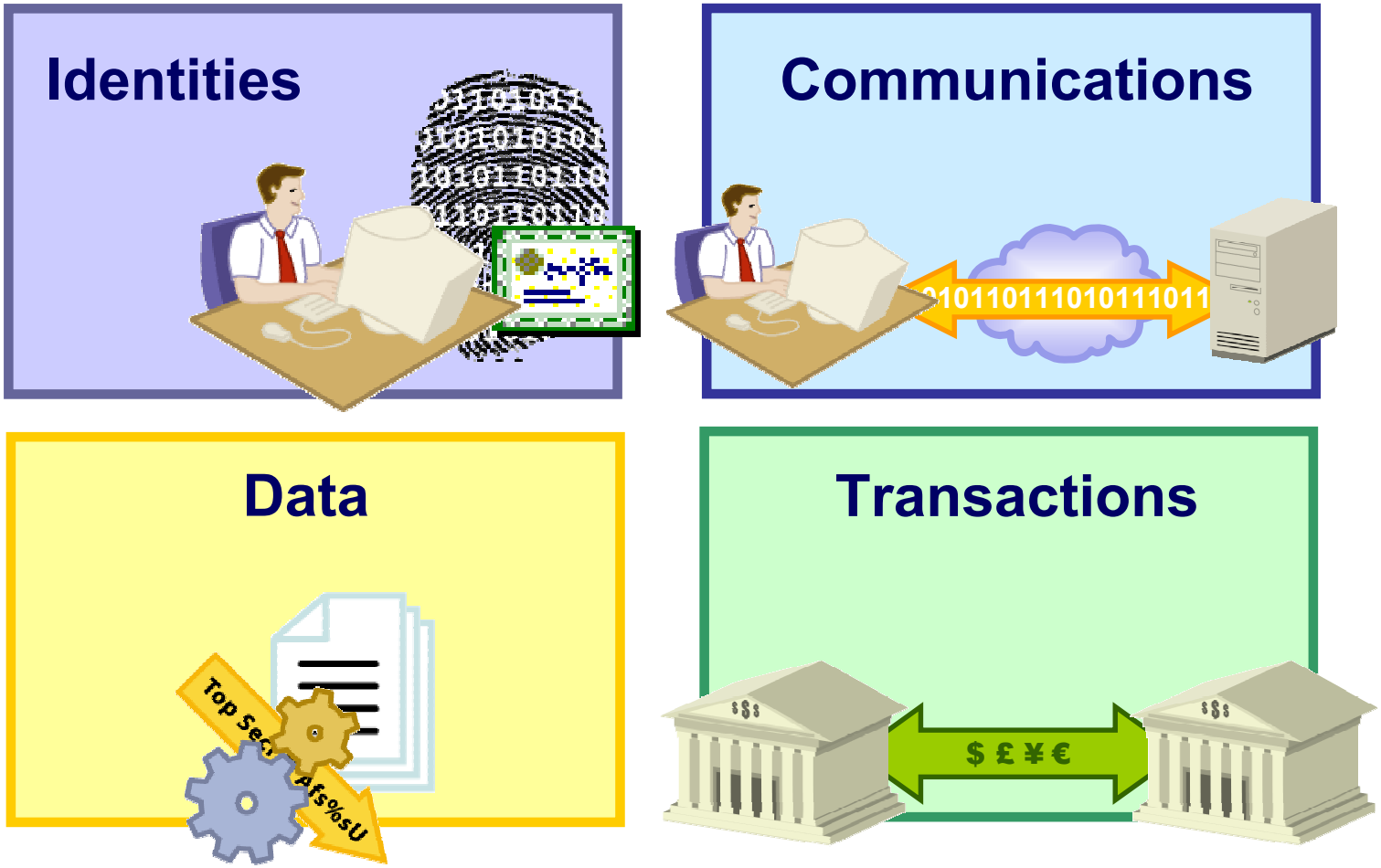
Salomon Smith Barney, Fortune 500 CIO Survey, August 2000

Chrysalis US Gov. Installations

- DISA
- Federal Bridge
- DOD PKI
- Dept. of Labor
- D.I.A.
- Dept of Treasury
- U.S. Border Patrol
- NASA
- Dept. of Agriculture
- Dept. of Energy
- Bureau of Public Debt
- DMDC
- State Dept.
- Various Intel Agencies
- DEA
- FDA
- Patent & Trade
- Federal Reserve

Chrysalis-ITS Security Hardware

Hardware solutions for securing:



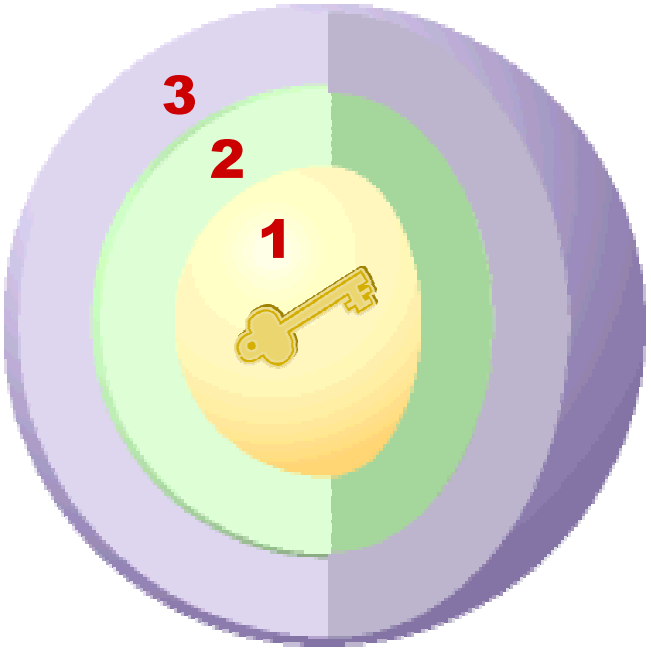
Chrysalis-ITS Advantage:

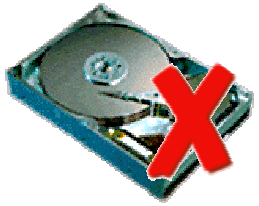
3 Layers of Security

1. *3DES Key Encryption*

2. *"M of N" Access Control*

3. *Tamper Proof Hardware*





Private keys are never stored on an unsecured hard disk!

A Challenge

- HSMs and cryptography are essential for securing online transactions and access to sensitive information
- Traditional HSMs are cumbersome and expensive to deploy
  - Require servers to be shutdown and opened for hardware installation
  - Require one HSM per server

Chrysalis Goal

Make HSMs more easily deployable and widely applicable

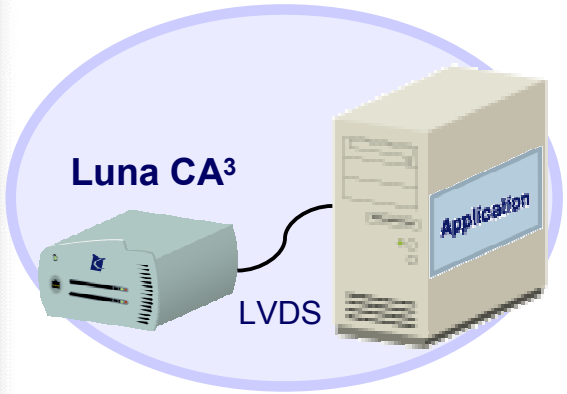
Solution

Transform HSMs into a shareable service deployed over the network

Product Positioning

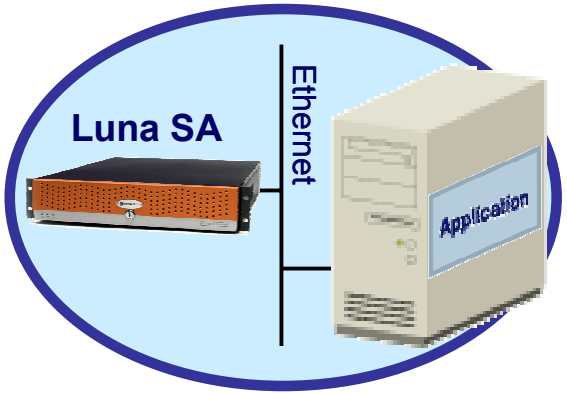
- Luna CA^3 is a root key management HSM
- Luna SA delivers a network-based HSM sharable by multiple servers
- Axenta is an appliance that securely runs applications and is built on the Luna SA platform

Server Attached HSM



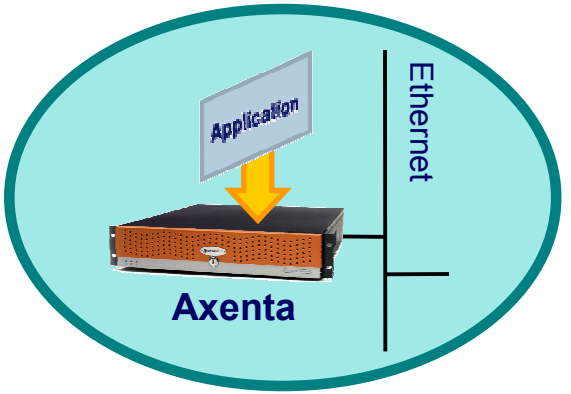
Luna CA^3

HSM Server



Luna SA

Security Appliance



Axenta

Chrysalis Secure Appliance Technology

Hardware Security
- *Hardened packaging*
- *Tamper detection*
- *FIPS validation*

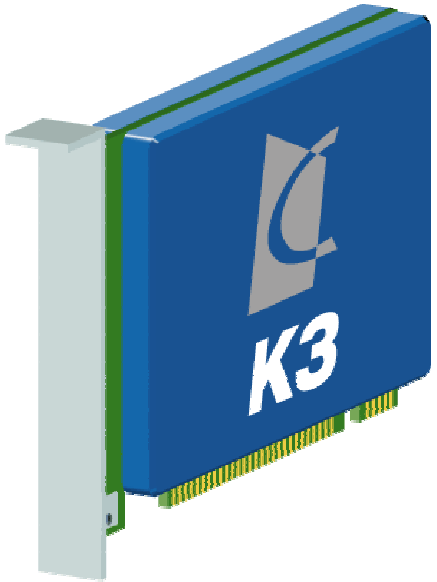
Software Security
- *Hardened OS*
- *Secure boot*
- *PKI signed code*

Operational Security
- *2-factor authentication*
- *Multi-person authorization*
- *Digitally-signed logs*

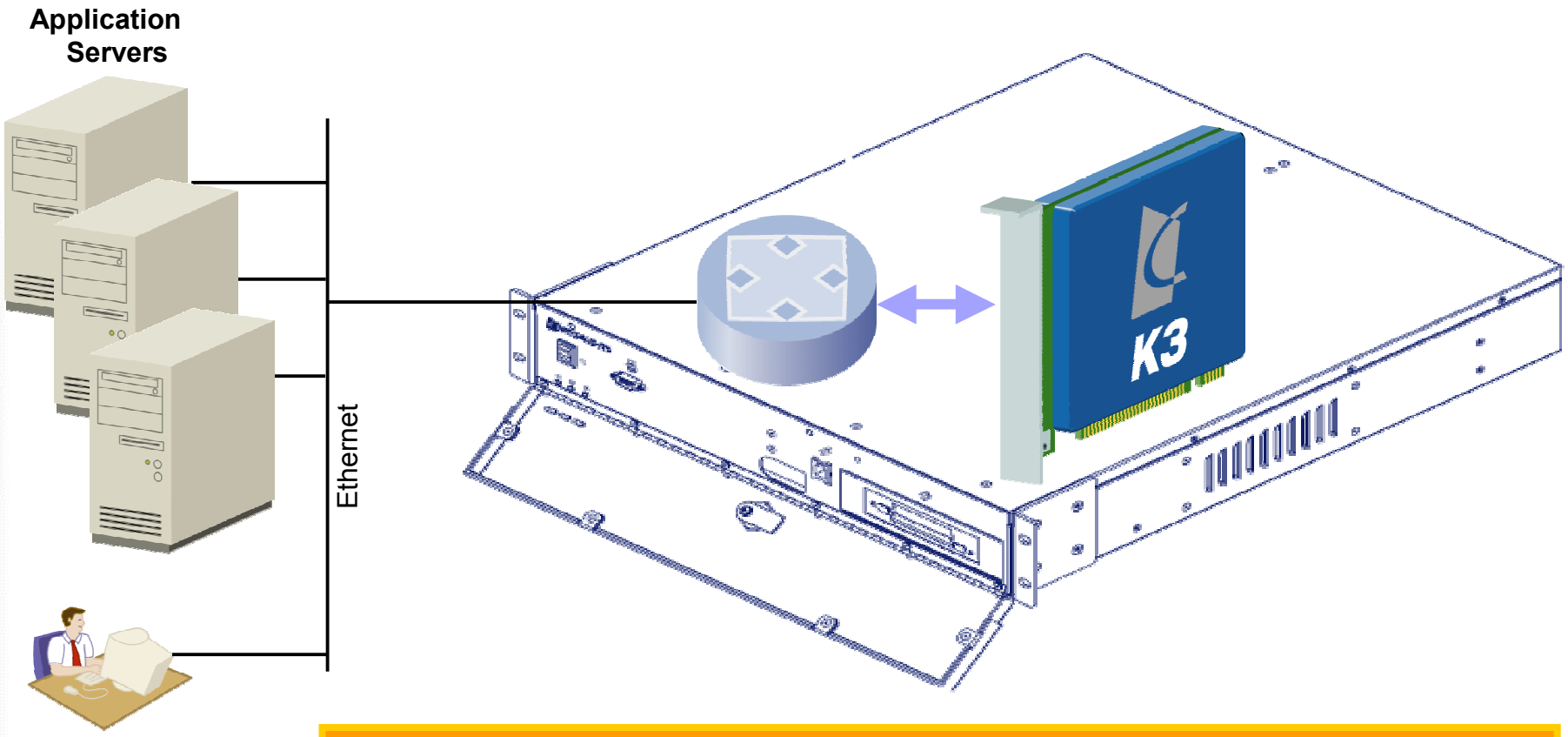
The K3

Chrysalis Cryptographic Engine

- Latest Chrysalis cryptographic processor
- 1200 RSA 1024 signings per second
- Being validated to FIPS 140-2 Level 3
- New features
- More code and key storage
- More algorithms: AES, SHA-2, E-Sign …
- Improved security design

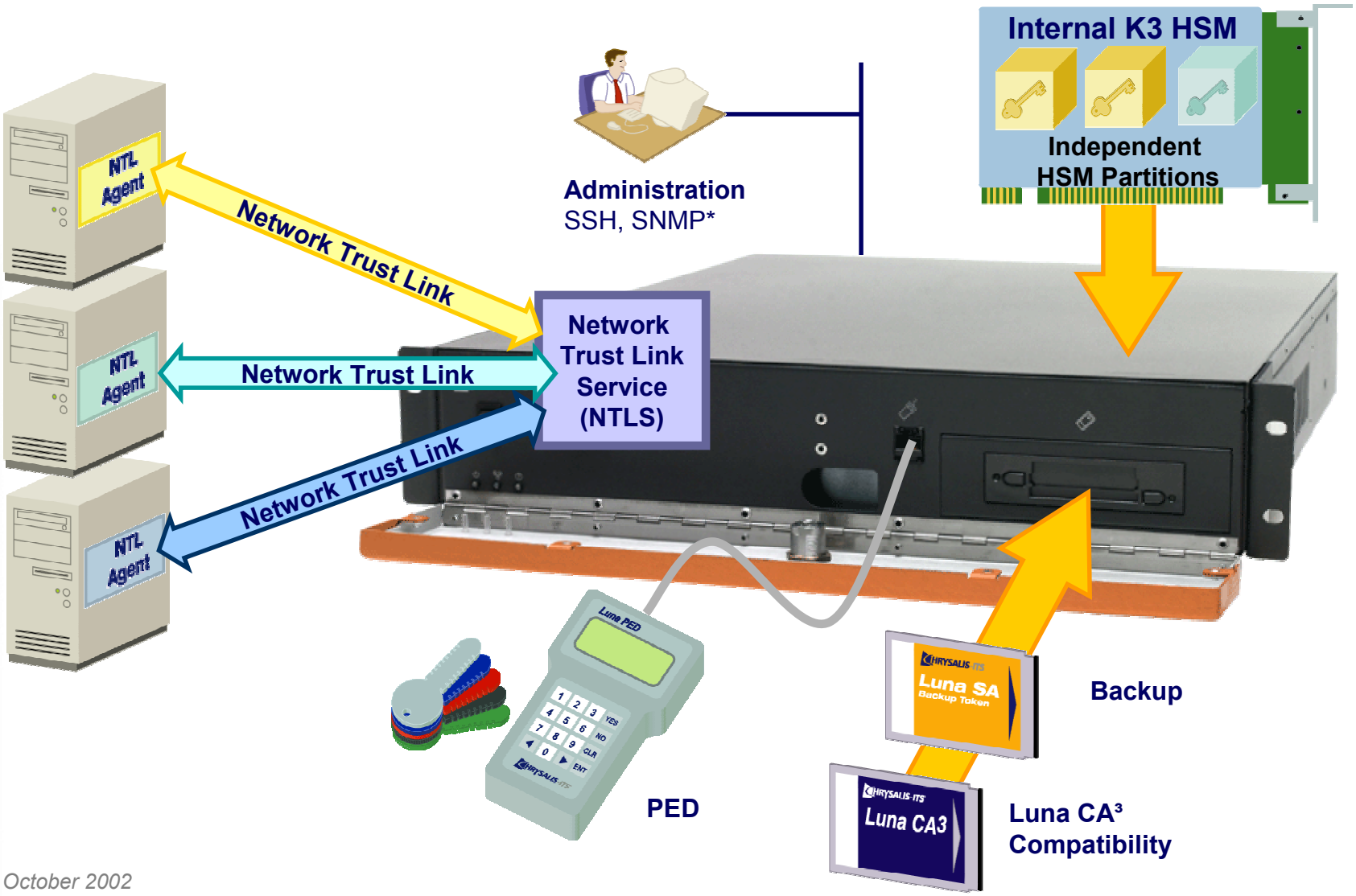


Harnessing K3's Capabilities



Build a secure server around the K3 to allow it to be securely shared across a network

Luna *SA* - *HSM Server*

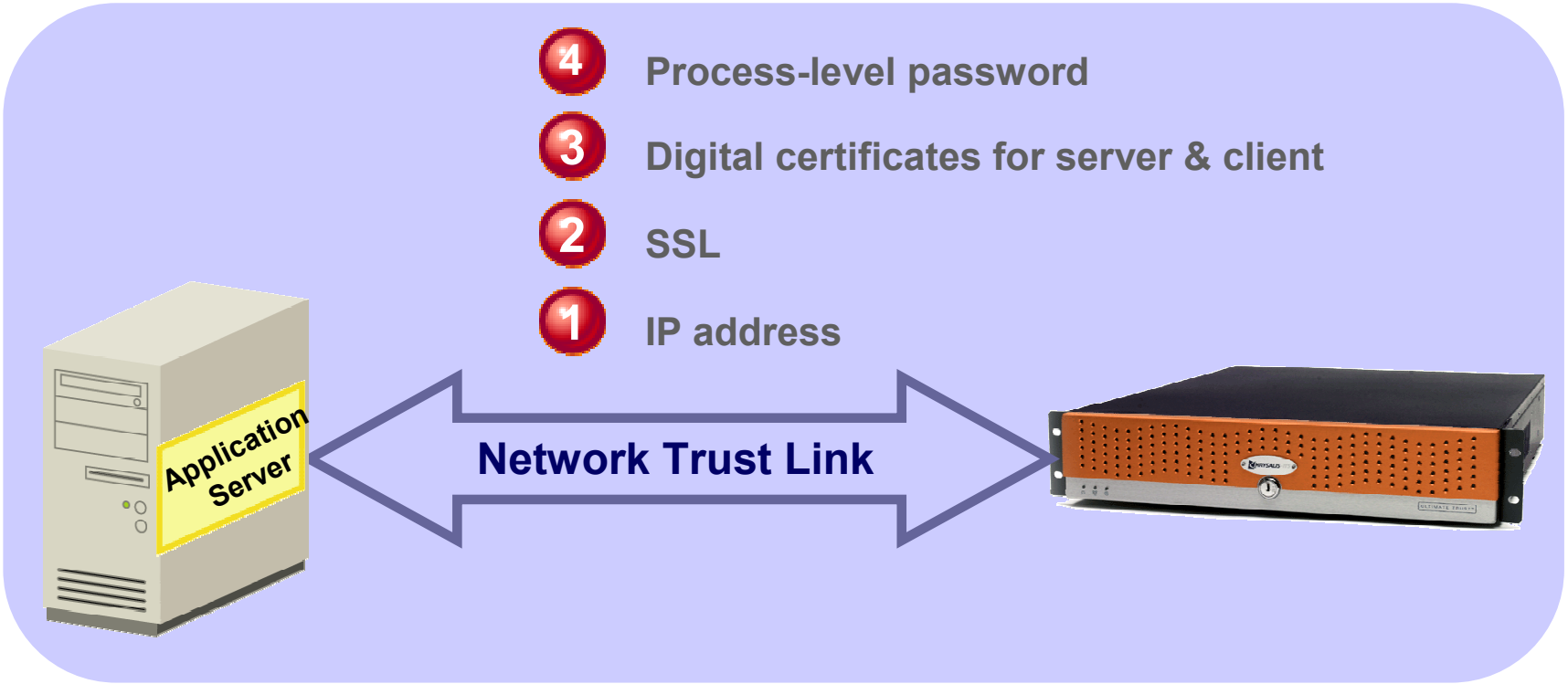


* October 2002

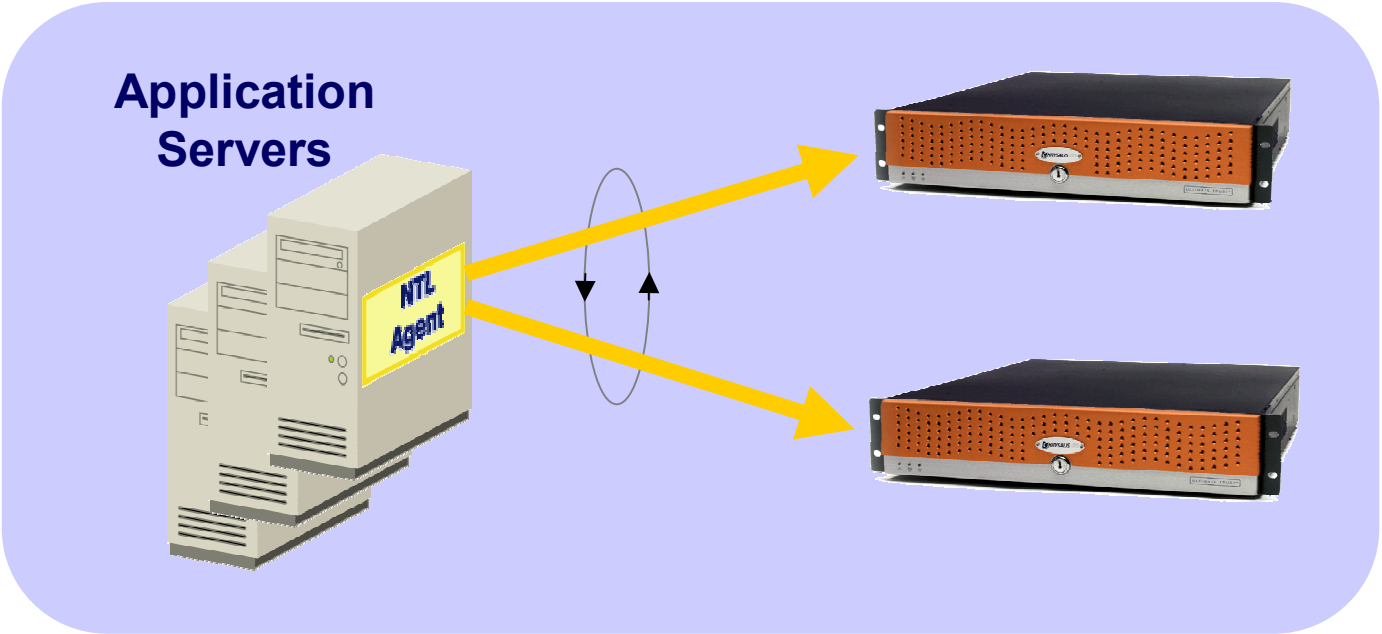
Network Trust Links

Transport Crypto API securely over the network

- Crypto keys remain in the HSM--only the API is transported (PKCS #11, CAPI, OpenSSL)
- Highly portable to any platform that supports TCP/IP



High Availability & Load Sharing



HSM server requests are cycled between active units

- Increase availability, performance, disaster recovery
- Luna SA's can be located anywhere on the network

Summary

Luna SA is a breakthrough HSM product that fundamentally changes the deployment model for HSMs

- ✓ **Lower Total Cost of Ownership**
  - HSM sharing lowers capital costs
  - Fewer boxes to own, install and manage
  - Increased performance is a software upgrade
- ✓ **HSM functionality deployed as a service over the network**
- ✓ **Fully compatible with current Luna HSM family**
- ✓ **Application programmable via upgrade to Axenta**