# Mission Critical Security for your Mission Critical Applications

Bringing NonStop™ to the Enterprise and the Enterprise to NonStop™







### **About XYPRO**

- 29 years serving the HP NonStop™ community
- Specialists in Mission Critical security, compliance and encryption
- Sales and Support offices around the world
  - Europe, North America, Asia Pacific, Latin America, and Africa
- FIPS 140-2 validated encryption
- XYGATE Merged Audit included on all HP NonStop servers







#### **Safeguard PRO**

- Comprehensive GUI interface to Safeguard, OSS, and SQL/MX security
- Extend Authentication for SSO with LDAP, RSA, etc.
- Synchronize all passwords across network
- Enable Role Based Access Control (RBAC) with Dynamic Object Security rules











#### **Audit PRO**

- Included with all new HP NonStop servers
- Collect, Alert, Forward, and Store Security Audit
- Integrate HP NonStop with the HP ArcSight SIEM or any other enterprise SIEM solution
- Automatically generate and deliver audit reports
- Comply with regulatory audit requirements





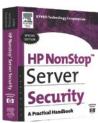


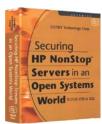




### **Compliance PRO**

- Automatic analysis of your entire NonStop security configuration and file integrity monitoring.
- Compliance comparison to thousands of industry best practice settings and specific regulations including PCI
- Custom configuration for analysis, detection, and reporting on your corporate security policy















#### **Access PRO**

- Privileged access management with command and subcommand control
- Eliminate shared ID use and employ the principle of "Least Privilege"
- Individual accountability for any user with keystroke logging











#### **Encryption PRO**

- Encryption for data-in-transit and data-at-rest
- SSL and SSH support for all TCP/IP communications
- Encryption library to encryption enable your applications
- Full function key management solutions
- FIPS validated to NIST 140-2



#### MUUCOO FINO

Grant privileges according to job function



Identity Management







# Partnerships

**Business and Technology** 



















## Database Management

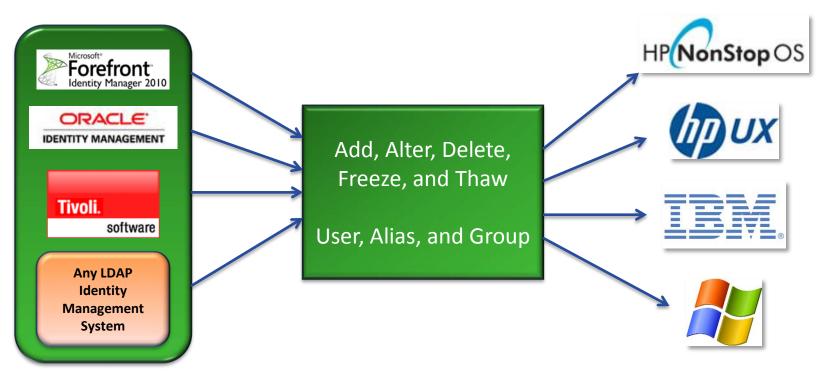


- SQLXPress
  - GUI Browser Interface for NonStop SQL (MX and MP)
- MARS
  - Merlon Auto Reload System
- Discover
  - Disk Storage Management
- Partner
  - Enscribe and SQL Partition Analysis



# Identity Management (IdM)







# **Key Features**

- Authentication, User Security Management, Password Management, Group Management
- Standard LDAPv3 Interface
- Risk Reduction, Policy and Regulatory Compliance, Increased operational efficiency, Reduced administration costs, Improved Security
- Extends current technology investments



### Data Centric Security



- Encryption
- Tokenization
- Masking



### Format-Preserving Encryption (FPE)



**Credit Card** 

7412 3456 7890 0000



Tax ID

934-72-2356



**Driver's License** 

RAMIRJM-302JA

**FPE** 

7412 3423 3526 0000

934-28-7756

BETJJKL-288TU

**AES** 

8juYE%UWjaks&dDFeruga2345^WFLERG

Ija&2924kUEF65%QarotugDF2390^32

ZLIIkdiI3&3#a45Ija8v%Jm<1Pa

- Supports data of any format
  - Credit Card, Social Security, Bank Account, Generic Alphanumerics, Dates, etc.
  - Maintain rules such as credit card checksums
- Encrypts all or part of a value e.g., first 6, last 4 preserved
- Preserves referential integrity
  - Allows encrypted data to be used as database indices & foreign keys
  - Enables searching on encrypted data without performance impact



# Voltage Advantages

# Cryptographic Breakthroughs that yield measurable business value:

- Stateless key management -- No Keys to Store or Manage or Distribute/Replicate
- True Enterprise Scalability
- Reduction in administration and infrastructure
- Exceptional Ease of Use
- No schemas or structured data table changes
- Full / partial encryption, masked, and tokenized data from same interface with AES-backed security
- From Mainframe to Mobile...



# **Device Centric Security**



Industry's first mass-scale device centric strong authentication

- Irrefutable Authentication Accuracy
  - Authenticates the user's device with a uniquely expandable & flexible multi-attribute device "key"
  - Expands to provide independent transaction verification
- Exceptional User Experience
  - Requires no user interaction or response
  - Sub-second device authentication
- Purpose-built for Integration
  - Secure service API for easy integration with existing solutions
  - Provision, manage, and report from other systems



### Device-centric Multi-Factor Authentication

Delivers customer protection against the most dangerous threats & online fraud attacks:

- Key loggers
- Stolen cookies and user credentials
- Phishing attacks
- Circumvented KBA and Risk-based authentication
- Man in the middle attacks
- Man in the browser attacks



### **Evolution of User Authentication Security**

Adoptability/Adoption (Ease of use, affordability, scale) adoption

Adoption

Mass,

\_imited

Weak

#### **Username & Password**

Online Mobile Services **Applications** 

Operating **Systems** 

SaaS/Cloud

**Device-centric Strong Authentication** ETAUTHORITY



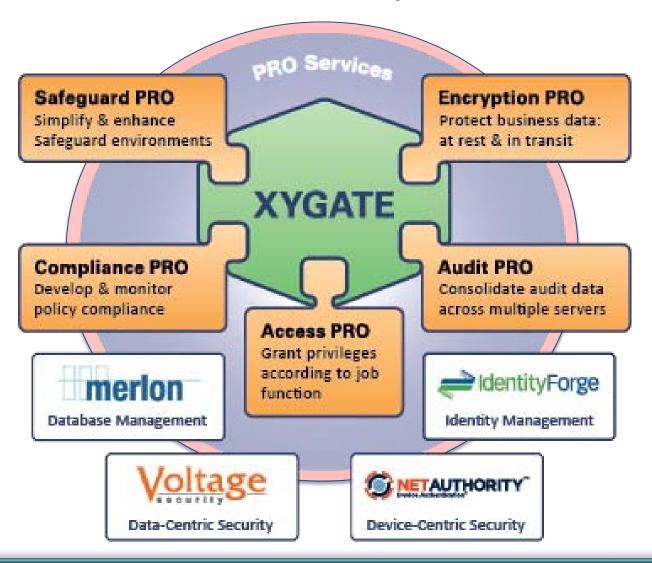
**Security Strength:** 

(Reliability, Accuracy, Complexity, Robustness)

Strong



### Mission Critical Security Solutions





### Questions?

