



APNIC

ARIN
American Registry for Internet Numbers





Security of the Address Allocation System

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Overview



- Introduction
- What to Protect
- Responsibilities
- Details
- Questions

Introduction



- Single RIR Failure != Internet Failure
- Services
 - Reverse Mapping
 - WHOIS
- RIR Ops
 - Medium Security Level IT Organization
 - Stable
 - Security Always a Priority
 - Procedures in Place and Reviewed

What to Protect



- Server
 - Database
 - DNS
 - Local
 - Infrastructure
 - WHOIS
 - Other (Mail, Web, etc)
- Network
- Facility
- Data
- Reverse Mapping DNS

Responsibilities



Asset	Responsible
Servers	RIR
Network	RIR
Facility	RIR
Data	RIR
DNS	IANA & RIR

Server



- Configuration
 - Services/Applications Permitted
 - Time Synchronization
- Authentication, Authorization, Accountability
- Backup
 - Backup Plan
 - Off-site Storage
- Recovery
 - Secondary Servers
 - Recovery Plan

Network



- Security Zones
 - Registration
 - Engineering
 - Administration
- Filters & Firewalls
- Routers
- Reverse Mapping

Facility



- HVAC
- Fire
 - Detection
 - Retardation
- Access Control
 - Personnel
 - Cable
- Power
 - UPS
 - Backup

Data



- Data Base
 - Authentication
 - Authorization
 - Accountability
- Privacy
- Collateral Information

Reverse Mapping DNS



Domain	Responsible
ARPA	IANA
In-ADDR	IANA
IP6	IANA
Sub In-ADDR	RIR
Sub IP6	RIR

- Critical Service
- RFC 2870
- DNSSEC



Questions?