

DOMAIN NAME SYSTEM



Admin, Logging
& Reporting
Guide
Document



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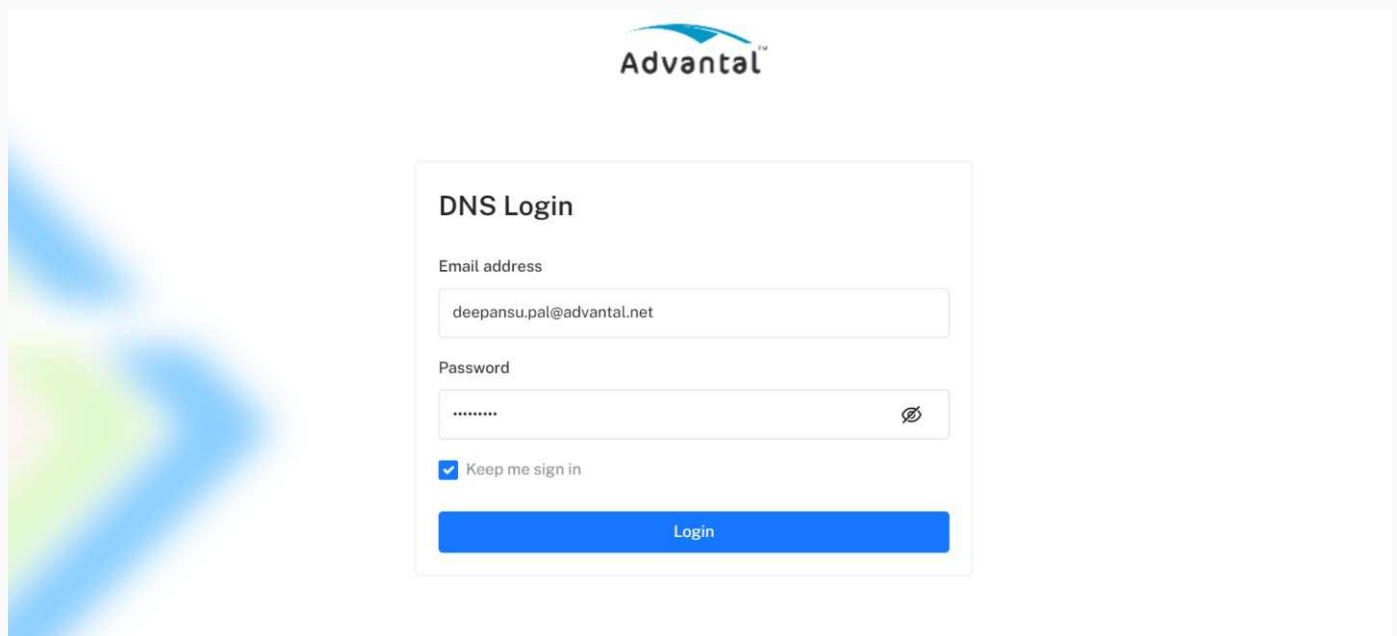


1. MANAGEMENT PLANE RESILIENCE & DATA PLANE ISOLATION

Architecturally separated management plane with dedicated OOB network, redundant HA managers across DCs, independent resource allocation, and zero-downtime maintenance capability—DNS services uninterrupted during management upgrades.

2. SECURE WEB ADMINISTRATION & REMOTE ACCESS

HTTPS web portal (TLS 1.2+), SSH key-pair access, RDP support for Windows admins, all with MFA, IP-based ACLs, and session timeout enforcement—secure encrypted administration from any location.



3. SSL CERTIFICATE MANAGEMENT VIA GUI

Centralized certificate lifecycle management with upload, validation, pre-deployment checks, automatic renewal alerts (90/60/30/7 days), scheduled deployment, and rolling node-by-node activation—no manual certificate handling required.

4. LOCAL ACCOUNT MANAGEMENT FEATURES

Web-based user creation, modification, deletion with email/mobile capture, password lifetime per-user, account status control (Active/Disabled/Locked), and soft-delete audit trail—RBAC-driven user administration.

The screenshot displays the 'User Management' section of the ShieldDNS dashboard. The interface includes a sidebar menu with options like Dashboard, Staff Management, Users, Roles, Password Policy, Manage Domain, Audit Logs, and AI Threat Vision. The main content area shows a table of users with columns for NAME, Role, MOBILE, Creation Date, and ACTIONS. Buttons for Refresh, Search, and Add User are visible at the top right of the table.

NAME	Role	MOBILE	Creation Date	ACTIONS
BB Bruce Banner hulksmash@gmail.com	Sales	9654566896	17-10-2025 05:00	
DP Deepanshu Pal deepansu.pal@advantal.net	SuperAdmin	9717825125	06-10-2025 07:40	
DR Desh Raj deshraj123@gmail.com	Admin	9856985695	14-10-2025 09:02	
RS Rahul Sharma deepkir.adva.net	SuperAdmin	9878676768	11-12-2025 05:29	
RP Ram Pal pansu.pal@advantaLnet	Manager	8978675456	11-12-2025 06:31	
SR Steave Rogers captainamerica@gmail.com	SuperAdmin	7896586325	17-10-2025 05:03	

The screenshot shows the 'User Information' form in the ShieldDNS dashboard. The form is divided into two columns for input fields. The left column contains fields for First Name, Mobile Number, and Email. The right column contains fields for Last Name, Role (a dropdown menu), and Password (with a toggle for visibility). There are 'Submit' and 'Cancel' buttons at the bottom right of the form.

5. PASSWORD STRENGTH & CHANGE ENFORCEMENT

Configurable password policy (length, uppercase, lowercase, numbers, special chars, history, duration) enforced at creation/change/login with real-time validation, periodic expiration reminders, and policy-wide updates—enterprise-grade password governance.

ShieldDNS

Menu

- Dashboard
- Staff Management
- Users
- Roles
- Password Policy**
- Manage Domain
- Audit Logs
- AI Threat Vision

Update Password Policy

Password Duration (in days) Min Password Max Password

30 5 15

UpperCase (must contain [A-Z]) LowerCase (must contain [a-z]) Number (must contain [0-9])

1 1 1

Special Characters

1

The same password check (can't set the same password) The white space check (can't set white space)

Update

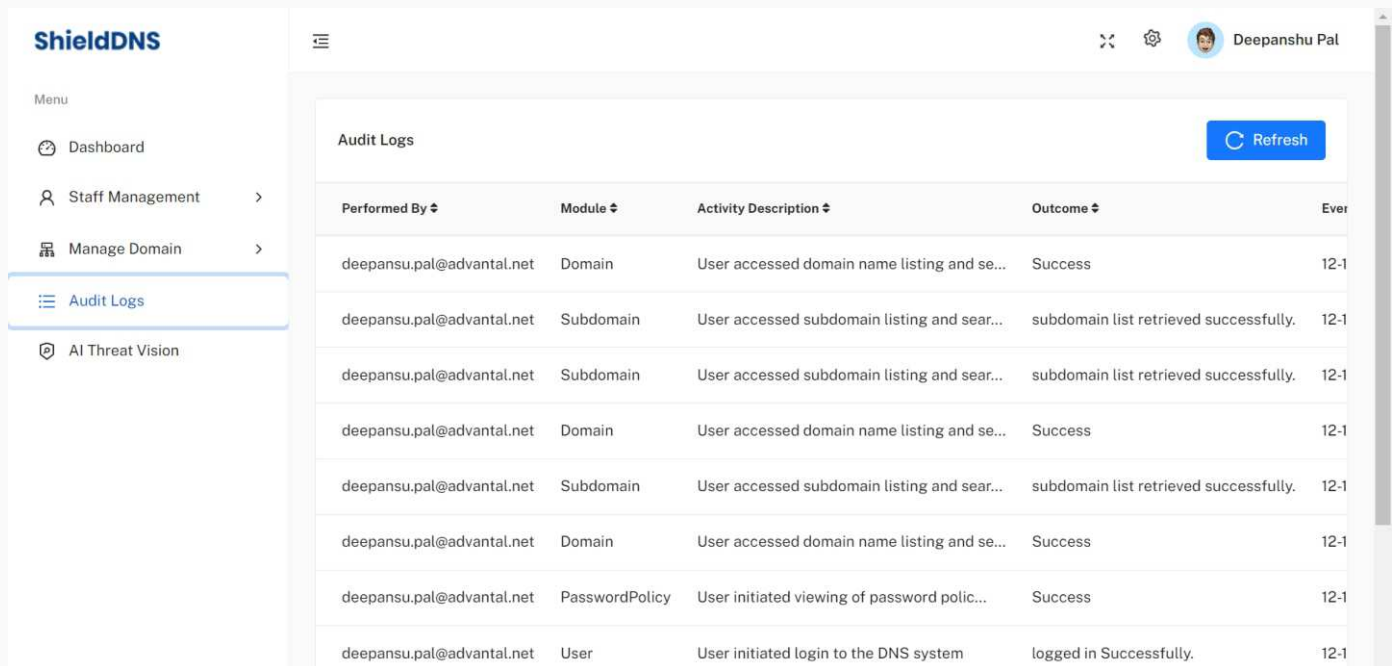
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6. MULTI-METHOD AUTHENTICATION (TACACS+, RADIUS, LDAP, LOCAL)

Support for local accounts, LDAP/AD integration with group mapping to roles, TACACS+ for enterprise AAA, RADIUS with OTP support, and configurable method priority with automatic fallback—flexible federated identity management.

7. COMPREHENSIVE LOGGING (AUDIT, QUERY, SYSLOG, DEBUG)

Complete audit trail of user actions, per-query DNS logging (client IP, domain, type, response, latency), real-time syslog export, and RFC 1713-compliant DNS debugging—full operational and forensic visibility.



Performed By	Module	Activity Description	Outcome	Event Time
deepansu.pal@advantal.net	Domain	User accessed domain name listing and se...	Success	12-1
deepansu.pal@advantal.net	Subdomain	User accessed subdomain listing and sear...	subdomain list retrieved successfully.	12-1
deepansu.pal@advantal.net	Subdomain	User accessed subdomain listing and sear...	subdomain list retrieved successfully.	12-1
deepansu.pal@advantal.net	Domain	User accessed domain name listing and se...	Success	12-1
deepansu.pal@advantal.net	Subdomain	User accessed subdomain listing and sear...	subdomain list retrieved successfully.	12-1
deepansu.pal@advantal.net	Domain	User accessed domain name listing and se...	Success	12-1
deepansu.pal@advantal.net	PasswordPolicy	User initiated viewing of password polic...	Success	12-1
deepansu.pal@advantal.net	User	User initiated login to the DNS system	logged in Successfully.	12-1

8. 90-DAY MINIMUM LOG RETENTION

Layered storage: hot (NVMe, 7 days), warm (SSD, 30 days), cold (tape, 12 months), with compliance hold indefinitely—meets regulatory requirements while managing storage costs.

9. MULTIPLE SYSLOG SERVERS WITH SEVERITY FILTERING

Support for 3+ syslog targets with per-facility severity configuration, automatic failover, and buffering if central server unavailable—enterprise SIEM integration without single point of failure.

10. LOG LEVEL TOGGLING VIA GUI & CONSOLE

Dynamic verbosity adjustment (OFF, ERROR, WARNING, INFO, DEBUG, TRACE) without service restart, per-component or global control, automatic disk protection, and disk space-aware log throttling—real-time troubleshooting without downtime.

11. ELEVATED ACCESS WITH CREDENTIALS & APPROVAL WORKFLOW

Request-based elevation with MFA-secured temporary SSH keys, 2-approver workflow for high-risk requests, real-time command logging, session auto-termination, and immutable audit trail—principle of least privilege enforcement.

12. DELEGATED ADMINISTRATIVE RIGHTS FOR APPLICATION OWNERS

Custom role creation with domain-scoped permissions, hierarchical RBAC (Org/Dept/App/Location levels), optional approval for DELETE operations, and full audit of delegated activities—segregation of duties without blocking operations.

Role	MODULE	ACTIONS
Admin	40	Edit Delete
Manager	12	Edit Delete
Sales	12	Edit Delete
SuperAdmin	40	Edit Delete
User	8	Edit Delete
ZXY	8	Edit Delete

13. ENCRYPTED BACKUP SCHEDULING TO REMOTE SERVERS

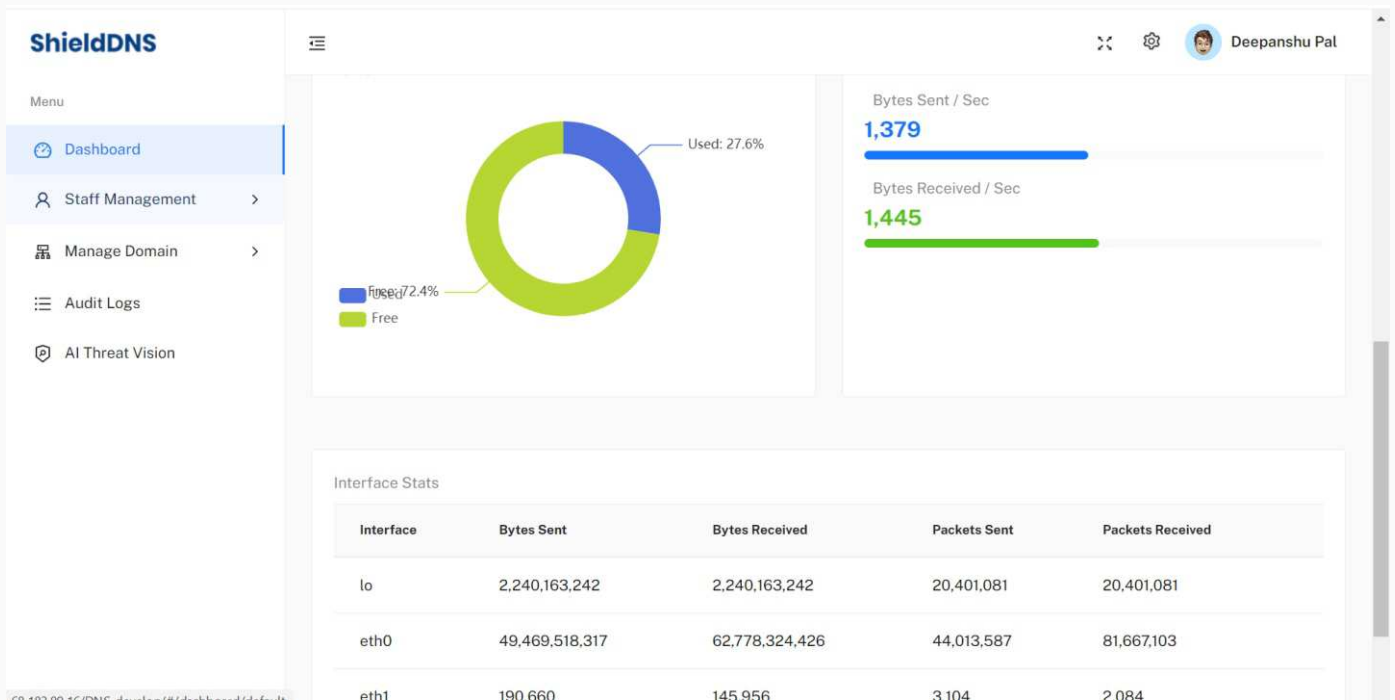
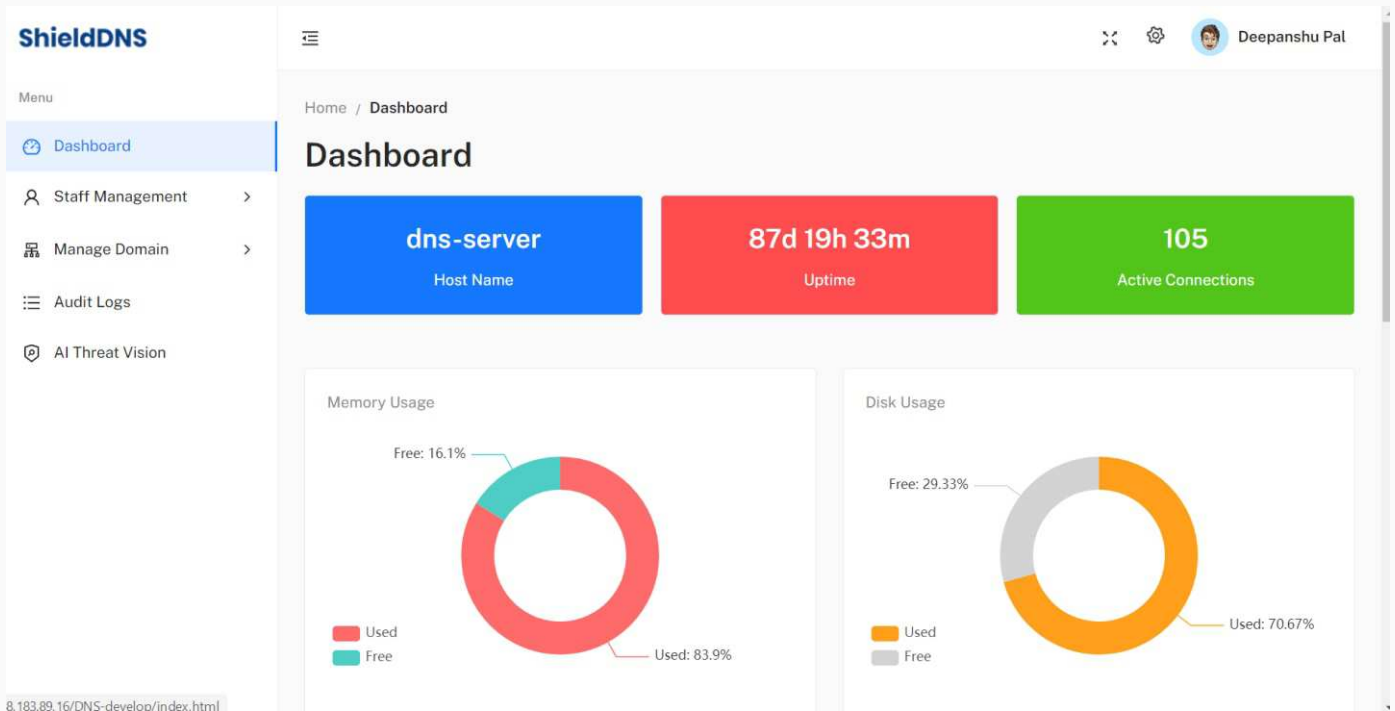
Automated daily incremental + weekly full backups with AES-256-GCM encryption, multiple targets (local NAS + off-site + cloud), integrity verification via checksum, and configurable retention (3 months hot, 12 months warm, 7 years cold)—3-2-1 backup strategy.

14. CENTRALIZED MULTI-SITE MANAGEMENT WITH AUTO-SYNC

Single portal managing all zones/configs across DC-A/B/C with real-time replication (<5 min), Raft-based quorum for 6 management nodes, automatic master failover, and eventual consistency guarantees—unified infrastructure control.

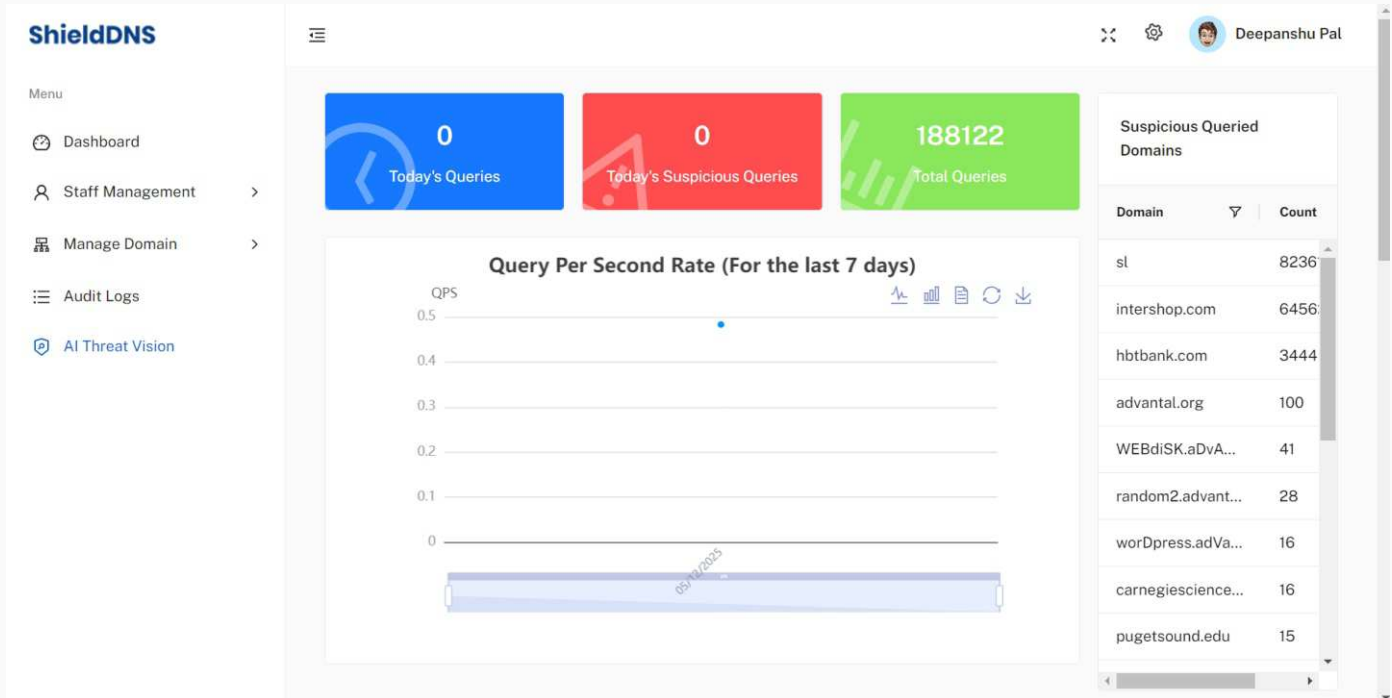
15. COMPREHENSIVE DASHBOARDS WITH REAL-TIME VISIBILITY

System health (CPU/Memory/Disk), DNS performance (QPS, latency P50/P95/P99, cache hit), top domains/types/clients, admin changes audit trail, cluster sync status, security threats—all updateable every 5-10 seconds with custom widget creation.



16. THIRD-PARTY SNMP V3+ MONITORING INTEGRATION

SNMPv3 with SHA-256 auth + AES-256 encryption, 10+ custom OIDs for DNS metrics (QPS, latency, recursion depth, DNSSEC failures, rate limits), automatic trap sending on threshold breaches—enterprise NMS integration.



ShieldDNS

Menu

- Dashboard
- Staff Management >
- Manage Domain >
- Audit Logs
- AI Threat Vision

Recent Queries

Timestamp	Source IP	Domain Queried	Domain Length	Dot Count	Numeric Count	Cal
05:12:2025 07:45 P...	154.85.199.69	sl	2	0	0	
05:12:2025 07:45 P...	154.85.199.69	sl	2	0	0	
05:12:2025 07:45 P...	154.85.199.69	sl	2	0	0	
05:12:2025 07:45 P...	154.85.199.69	sl	2	0	0	
05:12:2025 07:45 P...	154.85.199.69	sl	2	0	0	
05:12:2025 07:45 P...	154.85.199.69	sl	2	0	0	
05:12:2025 07:45 P...	154.85.199.69	sl	2	0	0	
05:12:2025 07:45 P...	154.85.199.69	sl	2	0	0	
05:12:2025 07:45 P...	154.85.199.69	sl	2	0	0	

17. INTEGRATED OS+APP UPGRADES WITHOUT DEVICE RESET

Single .tar.gz package with OS + DNS application + portal, multiple firmware versions retained, non-disruptive staging, automatic health check validation, and single-command rollback—safe zero-downtime upgrades.

18. REST API WITH FULL DOCUMENTATION

OAuth 2.0 JWT-based authentication, OpenAPI/Swagger spec, 100+ endpoints for zones/records/users/audit/backup, interactive API explorer, rate limiting (100 req/min), and comprehensive developer guide with code examples—programmatically infrastructure management.

19. DETAILED CUSTOMIZABLE REPORTING DASHBOARDS

Pre-built report templates (Performance, Security, Compliance, Operational), custom report builder, multiple export formats (PDF/Excel/JSON/HTML), scheduled distribution via email, drill-down capability, and trend analysis—data-driven operations.

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Talk to our experts and discover how automated, secure, and high-performance DNS can modernize your entire network stack.

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