

IPAM Products and Services



Every IP network manager, whether an enterprise network engineer or a service provider operations technician, must track IP addresses and assign them in accordance with a diligent inventory and assignment process. This IP address inventory drives the configuration of deployed DHCP and DNS servers running throughout the network, which automate address assignment and resolve domain names for clients. Managing these critical and tightly integrated DDI (DHCP/DNS/IPAM) functions requires a powerful and flexible solution. Enterprise network managers who use spreadsheets or server-by-server configuration methods run the risk of mistyping information or provisioning inconsistent information on different servers. This multi-step manual method also delays provisioning by requiring entry of similar data in multiple systems by multiple personnel impacting service delivery intervals or trouble resolution timeframes.





IPAM Products and Services from BT Diamond IP

BT Diamond IP IPAM products and services automate these three key elements of IPAM:

- IPv4/IPv6 address management – address inventory tracking and management
- DHCP configuration and management
- DNS configuration and management

With a user-definable topology model, BT Diamond IP customers can logically associate IP address space with locations, applications and business units, enabling users to quickly drill down to the location in question and identify and rectify IPAM related issues. On top of simply managing IP address space and corresponding DHCP and DNS services, the exhaustion of IPv4 space is prompting many customers to obtain IPv6 address space. Managing lengthy hexadecimal IPv6 addresses will prove difficult to track via spreadsheets.

BT Diamond IP IPAM solutions enable management of IPv4 and IPv6 address space together in an **easy and intuitive** user interface. Customers deploying BT Diamond IP solutions can also obtain management efficiencies through rich feature sets including subnet and IP address discovery with reconciliation, reclaiming of address space, auditing of address usage, delegating of administrator scope of control for accountability tracking and centralized management of BT Diamond IP, Microsoft, Cisco CNR and ISC/BIND DHCP and DNS services.

BT Diamond IP's **scalable and resilient** IPControl™ IPAM portfolio helps businesses more efficiently manage IP address space across mid-to-very large sized enterprise and service provider networks. Available as a software application, as self-contained Sapphire™ appliances, or as managed IPAM services, IPControl provides centralized, full lifecycle management of mission-critical IP management functions, including IPv4 and IPv6 address space assignment, allocation/ reallocation, pool monitoring and utilization tracking and creation and deployment of distributed DNS and DHCP configurations.

Using IPControl, organizations can achieve a return on investment of 150% to 500% or more in 0-3 years by automating and centralizing the manual processes associated with IP address tracking and DNS/DHCP configuration. In addition, by automating these IPAM functions, organizations can reduce network downtime by up to 15% and create a more efficient and stable IP infrastructure capable of supporting new technologies like voice over IP, wireless networking, and video conferencing.

IPControl provides industry leading IPAM, DNS and DHCP capabilities, and is recognized for delivering a flexible, easy to use platform. In addition, IPControl is highly scalable and offers extensive user definability to match our customers' unique requirements. Because IPControl supports multiple versions of DNS servers running BIND, Cisco CNR, or Microsoft, this alone may lower total cost of ownership dramatically.





IPControl™ Software

Award-Winning, Advanced IP Management System Improves Operational Efficiency and Service Levels

- **Comprehensive, patented approach to managing a critical network asset – IP addresses**
- **Flexible deployment options integrate with your multi-vendor DNS/DHCP infrastructure**
- **Easy to use, intuitive graphical user interface**
- **Centralized inventory with automated discovery and reconciliation**

IP address management (IPAM) is a critical necessity for today's IP networks, which grow more and more complex as new IP services and technologies are deployed. Whether your business serves customers, employees, partners or suppliers, your end users rely on seamless IP address assignment and rapid name resolution to utilize IP network resources.

IPControl™ is an advanced, centralized IPAM system that enables service providers and enterprises to take control of their IP address space and manage it according to their own policies and procedures. Using IPControl, organizations can achieve dramatic improvements in operational efficiency by simplifying and automating manual processes, reducing network downtime and creating a more stable and robust IP infrastructure capable of supporting VoIP, WLAN, Video and IPv6.

Get Complete IP Address Management in One System

IPControl is the most advanced and innovative IPAM solution available today. Available as a software application or pre-installed on Sapphire™ appliances, IPControl provides centralized, full lifecycle management of mission-critical IP management functions, including IPv4 and IPv6 address space assignment, allocation/ reallocation, pool monitoring and utilization tracking, inventory assurance with layers 2 and 3 discovery, and creation and deployment of multi-vendor DNS and DHCP configurations.

Integrate with Your Existing Multi-Vendor Infrastructure

Unlike many of today's IPAM solutions that only manage IP address space in a static database or

require a complete forklift "upgrade" of your existing infrastructure, IPControl integrates with your existing DNS and DHCP environment, providing support for Internet Systems Consortium (ISC DHCP and BIND 9 DNS), Cisco CNR, Microsoft and IPControl Sapphire DNS/DHCP appliances. In addition, IPControl's extensive APIs/CLIs enable integration points between IPControl and external systems for advanced automation of IPAM processes.

Manage Your IP Address Space the Way You Want

IPControl is highly flexible and scalable, enabling you to model, configure and manage IP name and address space the way you want to, not the way the software dictates. IPControl's patented container architecture enables you to not only define your own topology, address spaces, domains, device types and associated attributes, but to fully manage, configure, report on and integrate these user-defined elements with external systems.

Enhance Administrator Control and Effectiveness

IPControl's intuitive user interface, extensible templates and built-in validation features enable accurate configuration, consistent policy deployment and centralized management of IP address space and distributed DNS/DHCP servers even by non-expert users. In addition, granular access controls enable varying levels of responsibility to be delegated to multiple administrators across multiple dimensions.

Realize the Results

- Achieve ROI of 150 to 500% or more over 3 years from automating manual IPAM and DNS/DHCP processes
- Reduce downtime by 15% or more with more accurate DNS/DHCP configurations
- Centralize management with support for leading native DNS and DHCP server products
- Empower administrators with granular delegation of functional and logical access, visibility and control

- Lower cost of ownership versus competitive solutions with more features at lower cost
- Improve security by simplifying complex DNS/DHCP security parameters and configurations
- Simplify installation and upgrades with IPControl Sapphire appliance deployment
- Position your organization to improve service management and create the foundation for VoIP, WLAN, Video, IPv6 and more

IPControl IPAM Innovations

- First IPAM solution with multiple IPv6 automated allocation methods including sparse, random, best fit and manual
- Site templates provide the unique ability to add multiple subnets in one step including allocation of dual stack subnets
- Patented container architecture enables you to define and manage topology, address space, device types and associated attributes to conform to your IP network policies and procedures
- First comprehensive IP management solution encompassing the entire IP address lifecycle with a server-based, appliance-based and mixed-deployment offering plus managed IPAM services
- First and only integrated, full lifecycle IPAM solution with allocation, assignment and discovery features providing unique "planned vs. actual" reports for accurate inventory at layers 2 and 3
- First integrated IPv4/IPv6 address management solution
- First all-appliance IPAM solution with the first IPAM appliance managing distributed DHCP/DNS appliances
- Intuitive GUI provides easy navigation among containers, networks, subnets, IP addresses, devices, interfaces, resource records, domains, servers and more

Key Features

IPControl is a fully integrated software and appliance solution for the inventory, configuration and capacity management of IPv4 and IPv6 address space and multi-vendor DNS/DHCP servers.

Address Planning

- IPv4 and IPv6 networks allocated to any CIDR size or prefix length with ability to configure individual IP addresses, ranges or address pools within networks.
- Optimal automated address allocation to maximize utilization efficiency or manual override address allocation option.
- Automated and manual IP address and subnet reclaim maximizes address utilization efficiencies while providing further automation and time savings.
- User-defined policies determine which block and device types are permitted within the hierarchy and who can administer them.
- Address utilization trending and forecasting enables proactive address capacity management.
- Simplified address renumbering allows movement of address space to where it's needed.

DNS/DHCP Server Configuration

- Server templates streamline the server configuration process.
- Support for DHCP failover, multi-tiered addressing, multi homed hosts, DNS views, DHCP client classes, transaction signatures, MAC address processing, client ID, dynamic DNS and more.
- Advanced features configuration via the GUI for views, TSIG, GSS-TSIG, logging, statistics channels, address match lists, options and more.
- DNS configuration verification feature.

Address Management

- Patented container structure enables address management according to your topology, geography or other user-defined hierarchy.
- Layer 2 switch, Layer 3 router, ARP and IP discovery features enable IPv6/IPv6 inventory assurance and identifies potential access control violations.

- Advanced IPv6 address management enables automated block and DHCPv6 pool allocation, ip6.arpa domain creation, AAAA/PTR resource record automation and more.
- Restoration feature enables restoring of deleted devices and resource records
- User-defined thresholds and alerts provide notification of impending address depletion.
- Multiple graphical reports at any level in the container or address block hierarchy.
- Granular administrator policies dictate access to given functions, geographies, domains, subnets and blocks.
- Audit reporting promotes accountability and history tracking for administrators, subnets, devices, IP addresses and containers.

Integrated, Full Lifecycle Management

- Complete, top-down solution for managing address space, from IPv4 and IPv6 address assignment to allocation/reallocation, pool monitoring, utilization tracking and creation and deployment of multi-vendor DNS/DHCP configurations.

Benefits

IPControl can help your organization dramatically improve operational efficiency and service levels by automating, simplifying and integrating with your overall IP address management processes. Key benefits of IPControl include:

Ease of Use and Reliability

- Intuitive web interface and validation features enable accurate configuration and management of IP space and DNS/DHCP servers by non-expert users.
- Allocation templates enable “cookie-cutter” deployment of pre-set configurations.
- Automated optimal address block allocation saves time, reduces errors and maximizes address utilization. Additionally, sparse or random allocation for IPv6 blocks leverages this vast address space.

Security

- Multilayer discovery enables security managers to validate NAC admission policies and investigate security alerts for rogue devices.
- Granular administrator access controls enable control of administrator scope

Flexibility and Scalability

- Patented container mechanism enables you to organize IP address space according to your topology and router associations.
- User-defined fields for devices, blocks, domains and containers enable association of additional information or links for each of these elements.
- User-defined device types and multi-homed, multi-interface, multi-address capability supports today's devices and assets.
- Policies for permitted block and device types, naming and address allocation can be established at the container level.
- Granular administrator roles, controls and reports promote accountability and automate audit tracking.
- Scalable to tens of millions of IP addresses.

Proactive and Preventive Management

- Address pool monitoring and alerting help prevent IP address depletions and avoid resulting losses in productivity and revenue.
- Active discovery, reclaim and “planned vs. actual” views provide exception reporting and reconciliation of network changes of IPv4 and IPv6 address assignments, router subnets or switch ports.
- Rapid trouble assessment and resolution through the association of IP addresses with topology or other user-defined container structures.

Lower Cost of Ownership

- Affordably priced with respect to comparable IPAM solutions with equivalent feature sets.
- Integrated IPv4/IPv6 support protects your IP management investment and streamlines your deployment of IPv6.
- Rapid trouble assessment and resolution through the association of IP addresses with topology or other user-defined container structures.

IPControl™ Sapphire

Simple, Secure, Comprehensive IPAM, DHCP and DNS Appliance Solutions

- Award-winning, appliance-based IP address management
- Hardware and VMware models to choose from for DNS/DHCP services
- Simplified deployment and automated upgrades
- Built-in, secure hardened Linux OS
- High availability TwinMirror™ automated failover

IPControl™ Sapphire, an innovative line of advanced network services appliances from the BT Diamond IP product suite, simplifies deployment and consolidates monitoring and patch management for distributed DNS/DHCP appliances. Each Sapphire appliance is pre-installed with the IPControl centralized IPAM software or the IPControl DNS and DHCP services software, and is price/performance-engineered to provide a wide selection among platforms.

- The **Sapphire 20 series**, available as a centralized management (EX20) or DHCP/DNS (x20) appliance offers data center-quality performance, redundancy, and management.
- The **Sapphire 10 series**, also available as a centralized management (EX10) or DHCP/DNS (x10) appliance offers mid-range price/performance for a wide variety of deployments.
- The **Sapphire 10D series**, equivalent to the Sapphire 10 series but with dual power supplies
- The **Sapphire 5 series**, available only for DHCP/DNS network services, offers a remote office solution with exceptional price/performance.
- The **Sapphire Sx20** is a purpose-built DNSSEC authoritative server, designed for deployment as a hidden master, automating zone signing and key rollovers.

Hassle-Free Administration

All Sapphire models are simple to deploy and do not require you to apply OS patches or install DNS/DHCP services manually. The appliances are shipped with IPControl IPAM or DHCP and DNS services software pre-installed on a hardened Linux operating system. Sapphire EX appliances provide centralized monitoring, services control, and patch management of distributed Sapphire Sx and x-series appliances.

Complete, Centralized Solution

The IPControl Sapphire appliance family enables deployment of DNS/DHCP appliances, management of existing leading-vendor DNS/DHCP services, and centralized IP address management in a software-only, appliance-only, or mixed deployment configuration with one consistent, intuitive graphical web interface. This superior level of integration and flexibility helps vastly simplify operations, migrations, and staff learning curves and training requirements.



Key Features

- Purpose-built, secure Linux OS with advanced security features
- Automated TwinMirror™ provides redundancy with automated peer initialization for Sapphire x-series hardware platforms
- Four configurable network interfaces including port bonding
- EasyUpdate™ provides automated software and OS patch management
- “Lights out” Intelligent Platform Management Interface (IPMI) support
- Local or remote console access
- SNMP support for status and statistics collection
- Local syslog with forwarding
- Centralized management from IPControl software or Sapphire EX provides a single user interface for:
 - Configuration of advanced DNS/DHCP feature parameters
 - Centralized monitoring of Sapphire services states and events
 - Control of appliance level configuration
 - Integrated alerting capability for notification of an appliance alert or state change
 - Centralized patch management to simplify the upgrade process

Security Features

- OS kernel includes only necessary systems, services, and devices
- Uninterruptible boot process
- DNS firewall support
- Network interface ACLs and rate limiting
- DNS response rate limiting
- Services run on a separate jailed file system
- Services, binaries, libraries, and all data files do not have privileged attributes
- Services run in a sterile environment, reducing exposure
- Minimal open ports for use by DNS, DHCP, NTP, and IPControl
- Secure IPControl management interface

Benefits

IPControl Sapphire can provide substantial cost savings by automating and simplifying your entire IP address and DNS/DHCP appliance management processes. These savings can be realized from the following key features.

Powerful, Flexible Platforms

- Multiple Sapphire hardware platform options enable mix and match deployments for optimal price/performance.
- Virtual Sapphire appliance enables leverage of virtualization benefits including energy and real estate savings.
- IPMI interface provides lights out operation on all Sapphire platforms.
- Fiber interface option for Sapphire 10 and 20.
- Sapphire 20 features a hot-swappable power supply as well as hot-swappable hard drives.
- Failover TwinMirror pairs support effortless auto-synchronize for no fuss installation and replacement.
- OS, kernel and services upgrades can be deployed from the centralized IPControl interface.
- Centralized appliance monitoring via IPControl and via third party SNMP polling and syslog forwarding.

DNS/DHCP Server Configuration

- Simplified configuration of advanced DHCP and DNS features while providing holistic management of IP address space.
- DNS anycast support for enhanced performance and resiliency
- DHCP failover with support for client classes, MAC address processing, client ID, and more.

Simple, intuitive IPAM

- Patented container feature enables managing of address space in accordance with topology, geography, or other user-defined hierarchy.
- DHCP pool utilization tracking, trending, and alerting.
- Distributed multi-level discovery enables collection of network actuals for subnets, switch ports, ARP cache, and hosts.
- Reconciliation and reclaim features keep the IPAM database accurate with respect to network actual.

Address Management Accountability

- Granular administrator policies dictate access to given functions, approvals, servers, geographies, and blocks.
- Audit reporting promotes accountability and history tracking.
- Powerful search feature provides quick access to information.

Complete IP address management

- Holistically manage IP inventory and DHCP and DNS configuration from centralized IPControl interface.
- First appliance-based solution providing comprehensive IP management encompassing the entire IP address lifecycle.
- Integrated IPv4/IPv6 support protects your IP management investment and streamlines your implementation of IPv6.

Simple, flexible deployment

- Simplified procurement and deployment with one-stop integrated software and hardware or VMware installation.
- Flexible deployment options: server-based, appliance-based, virtual, and mixed.

Secure, hassle-free administration

- Hardened OS not based on a third party Linux distribution.
- Intuitive, award-winning web interface support of advanced features enables configuration and management of IP space and DNS/DHCP appliances and servers by less expert users.
- Four network interfaces with port bonding, static routes, and access control lists enable flexible partitioning of IP traffic.

Scalable, resilient architecture

- Hardware redundancy via TwinMirror
- Appliance alerting
- Centralized Executive redundancy

Sapphire Virtual Appliances

IPControl™ Sapphire from the BT Diamond IP product suite simplifies deployment and consolidates monitoring and patch management for distributed DNS/DHCP services. All Sapphire platforms are purpose-built, secure appliances and are performance-engineered for a variety of deployment options. The Sapphire virtual appliance is a self-contained virtual machine with the proprietary Sapphire operating system which is built from the ground up by BT Diamond IP. IPControl Sapphire virtual appliances can be installed on VMware ESX servers and managed using the centralized IPControl IPAM solution.

Sapphire Virtual Appliance Benefits

Sapphire virtual appliances provide a similar feature set as Sapphire hardware platforms, with the added benefit of installing as a virtual machine. Virtual appliances enable organizations to realize the benefits of virtualization, including:

- **Reduced energy consumption**
- **Server consolidation**
- **Reduced rack space requirements**
- **Ability to leverage current virtualization architecture**

As with our software, Sapphire virtual appliances are licensed perpetually with no expiration date as with other comparable virtual appliance products. Maintenance support programs are available to enable BT Diamond IP call center, web and email support, and IPControl; and Sapphire OS upgrades are included.

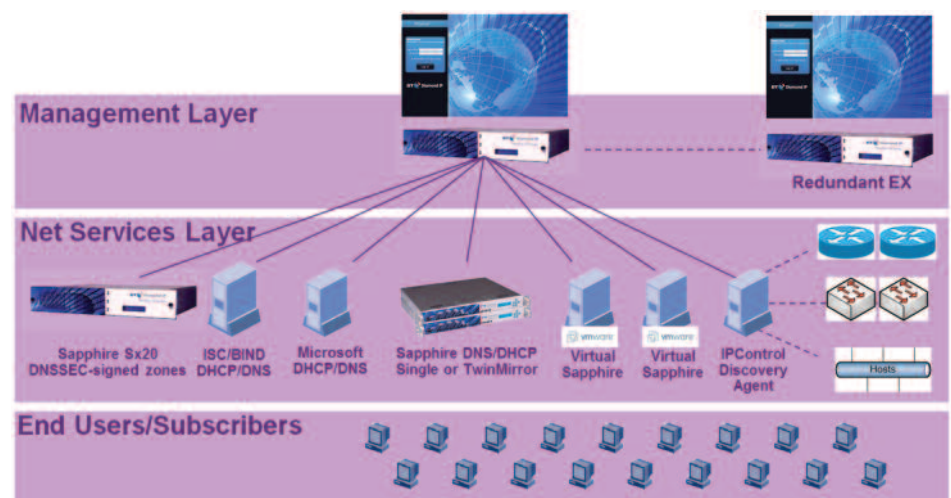
Virtual Installations with Centralized Control

Sapphire virtual appliances are simple to deploy as DHCP/DNS servers and do not require manual application of OS patches or installation of DNS/DHCP services. The virtual appliances are shipped with IPControl DHCP/DNS services software pre-installed on a hardened proprietary (not a modified distribution) Linux operating system. Each Sapphire virtual appliance can be centrally monitored via a centralized IPControl software installation or a Sapphire EX appliance, either of which provides centralized monitoring, services control, and patch management of distributed Sapphire virtual appliances. Patch upgrades encompass DNS/DHCP services upgrades as well as those to the appliance OS and kernel.

IPControl centralized management provides a holistic, consistent user interface to manage all of your IP address space, subnets, address pools, DNS domains and resource records. DHCP and DNS configuration information is created and deployed to relevant DHCP/DNS servers, hardware appliances or virtual appliances accordingly.

Maximum IPAM Flexibility

The Sapphire virtual appliance is another deployment and IP management option for customers desiring to maximize the return on IPAM investments. The IPControl architecture features a centralized, redundant IPControl Executive, available as software or as a Sapphire EX appliance. The centralized system is used to configure, monitor and manage a variety of deployed DHCP and DNS implementations, including Sapphire hardware appliances, Sapphire virtual appliances, stock ISC/BIND DHCP and DNS servers, Cisco CNR servers, and stock Microsoft DHCP/DNS servers. BT Diamond IP also offers a variety of support programs as well as managed services in various flavors to assist customers in maintaining their IPAM infrastructure and to perform moves, adds and changes on behalf of customers.





Sapphire Virtual Appliances

Key Features

- Multiple Sapphire platforms to choose from for mix/match optimal deployments
- Hardened Proprietary Linux OS with advanced security features
- EasyUpdate™ provides automated software and OS patch management and eliminates DNS/DHCP server upgrade hassles
- Centralized management from IPControl software or Sapphire EX simplifies deployment of advanced DNS/DHCP features
- SNMP MIBs enable collection of services statistics by SNMP management systems
- Local and remote syslog support
- DNS security features including DNSSEC validation, DNS firewall and response rate limiting

Security Features

- OS kernel includes only necessary systems, services, and devices
- Uninterruptible boot process
- Services run on a separate jailed file system
- Services, binaries, libraries, and all data files do not have privileged attributes
- Services run in a sterile environment, reducing exposure
- Minimal open ports for use by DNS, DHCP, NTP, and IPControl
- Secure IPControl management interface



Managed IPAM Services

Streamlined IPAM and DHCP/DNS Management Services

BT Diamond IP's award-winning IPControl Sapphire product line streamlines customers' IP address management (IPAM) functions as well as DHCP and DNS server administration. Acclaimed as "amazingly intuitive" by Network Testing Labs, IPControl simplifies IP address planning and DHCP and DNS server configurations. But as with all appliance- or server-based services deployments, the administration of each server introduces added technical and political complexity.

Customers manage not only the IPAM configurations of deployed DHCP and DNS services in their respective networks, but also perform system administration tasks such as monitoring, upgrades and configuration of the servers running these services. Often this system administration function is performed by a separate organization or team, which further increases complexity in the coordination of upgrades and troubleshooting.

Sapphire Infrastructure Management (SIM) Service

The foundation of BT Diamond IP's Managed IPAM Service is the Sapphire Infrastructure Management (SIM) Service, which provides management of backups, upgrades, monitoring and administration of deployed IPControl Sapphire appliances. The SIM service provides for the system administration of deployed Sapphire appliances, including 24 x 7 x 365 monitoring of Sapphire appliances, proactive trouble reporting and resolution and upgrading of Sapphire operating system, kernel, as well as DHCP and DNS services for security fixes or new feature sets. These requisite administration functions are performed by BT Diamond IP experts within the BT Diamond IP Managed Services Center, offering unsurpassed expertise and responsiveness.

Managed IPAM Service

The Managed IPAM Service encompasses and embellishes the SIM Service to provide support for IPAM moves, adds and changes. The IPAM Managed Service offers a complete IPAM outsource option, providing all of the system administration, monitoring and upgrades for deployed Sapphire DHCP/DNS appliances plus the day-to-day updates to IP address blocks, subnets, IP address assignments, address pools, DNS domains and resource records. Customers may establish regular changes and log requests through a simple BT Diamond IP Managed Service portal. These IPAM functions are performed by BT Diamond IP experts within the BT Diamond IP Managed Service Center to provide rapid and accurate IPAM services.

The IPAM Services Stack

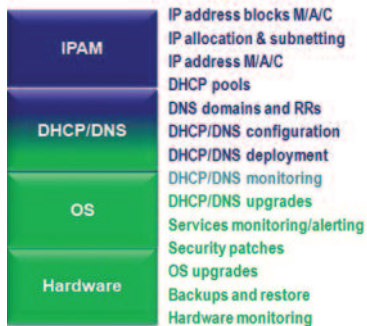
Any IPAM deployment requires administration not only of IPAM application layer changes such as subnet, address, resource record or address pool moves, adds and changes, but additionally administration of the underlying server and/or appliance infrastructure. Depicted to the right as a four layer stack, the IPAM functions comprise the top layer and include block management, subnet allocations and static and reserved IP address assignments. This layer also includes DHCP pool planning in conjunction with the address plan and DNS domain planning. These functions in turn support the DHCP/DNS layer where pools, domain and resource records are configured on respective DHCP and DNS appliances.



Traditional IPAM systems stop at this point, leaving the customer to monitor deployed services, performing upgrades of DHCP/DNS services as well as operating systems, applying security patches, and backup and restore. These tasks are often cumbersome yet critical to keeping DHCP and DNS services up and running. BT Diamond IP Managed IPAM Services can help you address these lower layers or the entire IPAM stack.

BT Diamond IP Managed Services

BT Diamond IP's hallmark is flexibility; the IPControl Sapphire product line is the most flexible on the market. But now BT Diamond IP offers an additional dimension of flexibility, encompassing all or part of the IPAM services stack.



The SIM Service, highlighted in green in this IPAM services stack, enables you to retain all IPAM move/add/change (M/A/C) functionality while outsourcing monitoring and administration of deployed Sapphire DHCP/DNS appliances.

The IPAM Managed Service adds the blue portion to encompass the entire stack, providing the benefits of the SIM service with the added ability to outsource M/A/C for your IPAM infrastructure including address blocks, subnets, IP addresses, address pools, DNS domains, resource records and other DHCP/DNS configuration parameters. IPAM M/A/Cs can be made at regularly scheduled intervals and upon request using BT Diamond IP's Managed Service request portal.

Service Benefits

- Effortless lifecycle management of Sapphire IPAM, DHCP, DNS appliances
- 24 x 7 x 365 staffed managed services center for support and monitoring of your Sapphire infrastructure
- Streamlined trouble reporting and resolution times
- Encompasses Sapphire system administration functions
- No need to train personnel on Sapphire system administration, monitoring and troubleshooting
- Flexible deployment of Sapphire at customer sites, BT Diamond IP sites or both
- Proactive notification of alerts affecting your IPAM infrastructure with resolution status and results
- Scheduled feature upgrades included providing continual usability and functionality benefits
- IPAM moves/adds/changes
- Reduced IPAM lifecycle costs
- IP blocks, subnets, addresses, DHCP and DNS server configurations
- Reduced IPAM training and support requirements
- Enhances overall IPControl Sapphire support leveraging detailed knowledge of your IPAM/Sapphire infrastructure
- IPAM reports

Key Features

- Secure, reliable managed services environment
- Round-the-clock automated problem resolution by IPControl experts
- Proactive maintenance of your IPAM and Sapphire DHCP, DNS infrastructure
- Automatic updates of the latest network services security patches
- Continually updated IP infrastructure information and monitoring
- Automated problem reporting and resolution
- Continuity in managing changes to IPAM, DHCP, DNS infrastructure
- Supports IP address, subnet, pool, domain, and resource record moves, adds and changes



BT Diamond IP backs up its award-winning IPAM products with the vast resources and global presence of BT. BT Diamond IP professionals are available to provide a variety of services to enable you to realize the maximum benefit from your IPControl Sapphire deployment. From planning your deployment to migrating from a legacy DDI solution, and from classroom or on-site training to ongoing operation support, BT Diamond IP is there to make your smart choice even smarter. BT Diamond IP also offers a variety of support programs to suit your budget and support requirements.

Planning and Implementation Services

IPControl and Sapphire products offer the industry's most flexible deployment options. Whether you're seeking to centrally manage an existing infrastructure of ISC, CNR and Microsoft servers, migrate to an all-appliance deployment, or even deploy IPv6, BT Diamond IP professionals are available to help you plan your best practices based deployment of IPControl to help you meet your performance, high availability, scalability, and budget requirements.

IP Management System Migration

Whether you're upgrading from a competitive product or spreadsheets, BT Diamond IP professionals can assist with the migration planning and implementation. IPControl Sapphire offers a variety of migration and upgrade techniques and automation tools to facilitate this process. From imports of standard BIND configuration files, DHCP address pools, spreadsheet data, discovery data, to massaging competitive database files, BT Diamond IP is there to get your data upgraded.

Product Training

Extensive product training is available to educate you and your team on the rich feature set available to you with IPControl and Sapphire. Standard week-long classroom training is provided quarterly, with hands-on lab exercises. Ad hoc scheduled training at your facility is also available on a variety of IP address management topics.

IPControl and Sapphire Integration Services

Leverage IPControl's rich set of integration functionality to integrate IP address management functions into your overall IT automation architecture. For example, implementation of a customized end user request portal enables organizations to empower their end users with handling common address assignment tasks while keeping the IPControl database up to date.

Ongoing Support

If IP networks were static, you'd have no need to manage your IP space after deployment. The only "static" reality is that IP networks are dynamic, constantly requiring updates to address allocations, assignments, and DHCP/DNS server configurations. BT Diamond IP professionals are available to operate or help you operate your IP network, including management of your IP address space using IPControl Sapphire. Our products are fully supported under your support agreement, which offers the following support options:

- **5 X 8 U.S. local time support for Standard help desk support**
- **24 X 7 Gold help desk support with around-the-clock staffing, not pager support**
- **24 X 7 Platinum help desk support with remote VPN access to assist with "virtual hands on"**

All support programs provide for all subscribed product upgrades and new releases, help desk telephone access during subscribed hours, full support site access to published KnowledgeBase articles, and our quarterly Customer Spotlight newsletter.

BT Diamond IP is a leading provider of software and appliance products and services that help customers effectively manage complex IP networks. advanced IP management solutions help businesses more efficiently manage IP address space across mid-to-very large sized enterprise and service provider networks. Our cable firmware management solution helps broadband cable operators automate and simplify the process of upgrading and maintaining firmware on DOCSIS devices in the field. Our customers include regional, national and global service providers and enterprises in all major industries.



For more information, please contact your local BT Diamond IP Representative. You can also email us at btdiamondip-sales@bt.com, visit our web site at www.btdiamondip.com, or call **1-800-390-6295** in the US or **+1 610 321 9000** outside the US.







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27 January 2015