

# IP AddressWorks v2.0

## Directory-Centric IP Address Management Software

### IP AddressWorks:

- Gain control of IP infrastructure
- Improve network efficiency
- Lower management and downtime costs
- Create directory-enabled network foundation

### IP AddressWorks™

Process Software's IP AddressWorks is a directory-centric software solution that delivers efficient centralized management of IP (Internet Protocol) addresses and other network resources across the enterprise. Using a Windows-based management interface, IP AddressWorks simplifies the deployment and control of the network's DNS and DHCP servers. IP AddressWorks is available for Windows NT, Sun Solaris and OpenVMS.

### The Benefits

IP AddressWorks offers a multitude of benefits to the entire organization — from the CIO who requires a reliable directory-enabled infrastructure, to the network administrator who wants a more efficient way to configure and track multiple DNS and/or DHCP servers, and the end-user who demands uninterrupted IP services.

### Improve Network Efficiency

Administrators get a real time snapshot of the network, simplifying troubleshooting and ongoing administration. IP AddressWorks provides an automated, centralized approach to IP address administration that eliminates problems and errors caused by manual address administration. Address changes, such as moving a node from one subnet to another, are accomplished with a single drag and drop action. The entire network can be viewed by node, network/subnet, domain, or DNS/DHCP server, making address administration easier. The easy-to-use Management Interface reduces errors, simplifies training, and frees IS personnel to concentrate on other network tasks.

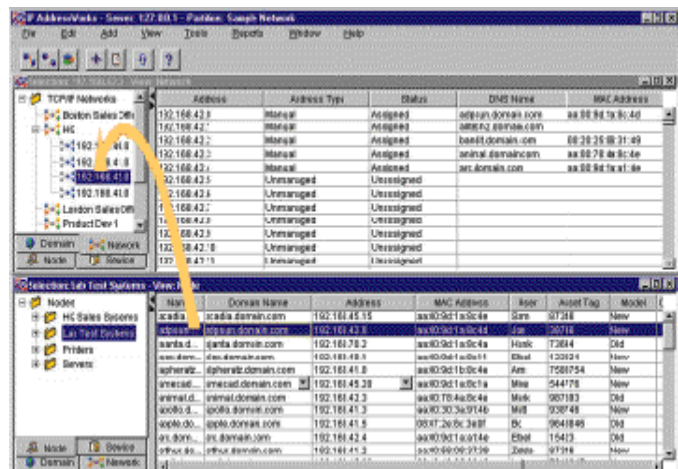
### Lower Management and Downtime Costs

Lower costs can be realized through: automation of the IP address management process vs. time-consuming manual methods, less training, and a lower level of expertise required. Highly reliable servers and Safe-failover capabilities reduce network downtime.

### Standards-Based Directory-Centric Architecture

IP AddressWorks provides an extensible directory foundation for the deployment of business critical applications. Its standards-based architecture allows network managers to deploy directory-enabled applications on a reliable network infrastructure.

IP AddressWorks integrates DNS servers, DHCP servers, and IP address management with an LDAP (Lightweight Directory Access Protocol) Directory. Process Software has implemented an LDAP architecture that uniquely provides the benefits of fast reads with data integrity and management flexibility.



*IP AddressWorks "drag and drop" feature simplifies IP address moves and changes.*

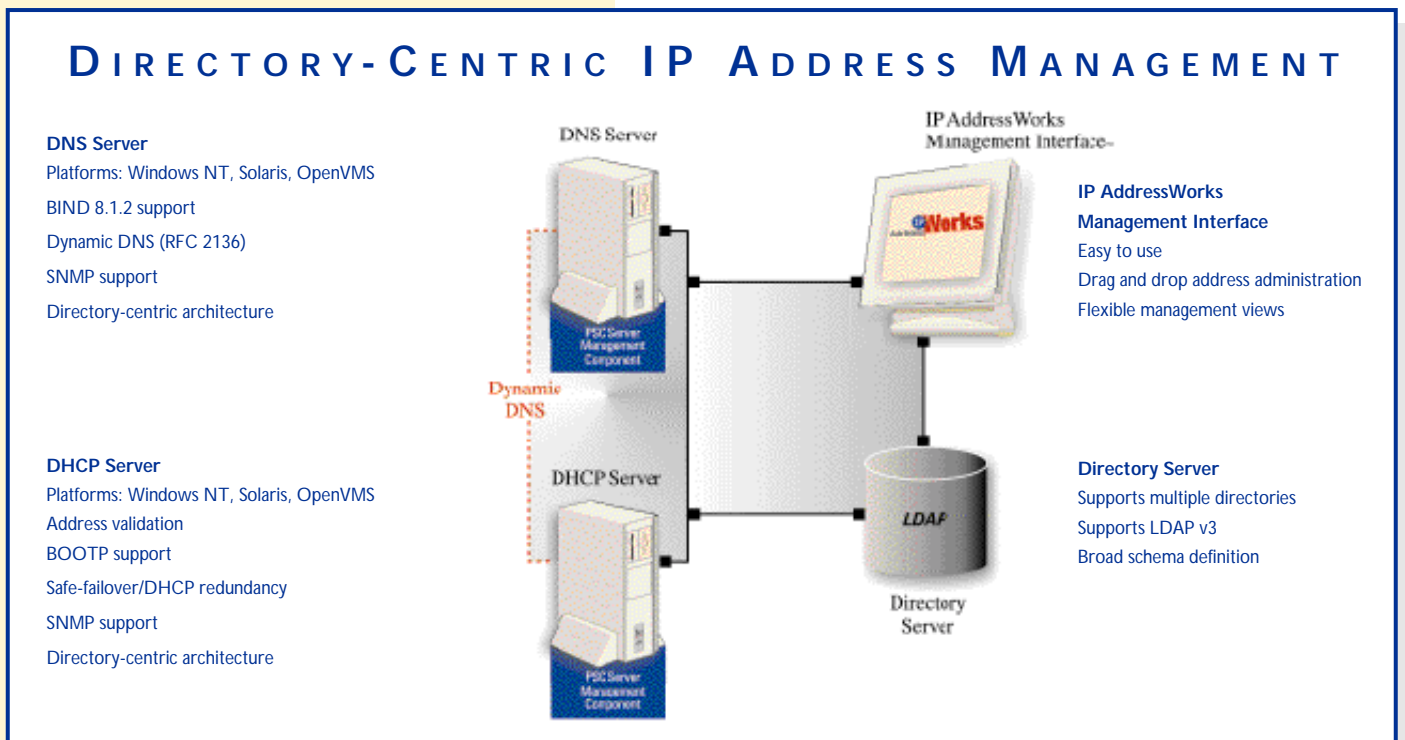
“We knew we had to move beyond our home-grown tools and find an enterprise solution for IP address management. We discovered that, unlike other products out there, IP AddressWorks is built on industry standards, so it works across platforms. IP AddressWorks allows us to maintain an open environment with continued support for DNS services from other vendors while adding the benefit of Address Works' superior management ability.”

Larry Fahnoe  
Merrill Corporation

This standards-based directory approach also facilitates sharing data without the problem of being linked to a specific vendor's database, or having to run your entire IP network on a particular platform or version.

### Leading Industry Standard Efforts

Process Software's active membership in several standard-based organizations, including the DMTF (Distributed Management Task Force), the Directory Interoperability Forum, IETF (Internet Engineering Task Force), and DSML (Directory Service Markup Language) Working Group, ensures you advanced directory-enabled management and dynamic addressing capabilities based on standards.



“IP AddressWorks is critical to our network operation. The product's directory-centric architecture is a key reason for its success. AddressWorks supports LDAP and is very flexible and extensible. When thousands of students and faculty log on from different locations, they are essentially altering their own IP addresses, and this only works because you have an accessible LDAP directory. That's also why it's essential to have DHCP and a DNS redundant configuration, so that a failure doesn't stop a user from logging on. IP AddressWorks has an intelligent failover process. It's very resilient.”

Andrew Darling  
University of Massachusetts, Dartmouth

### Centralized Management

IP AddressWorks allows managers to accomplish all DNS and DHCP server configurations from a central site, as well as report back on dynamic activity such as IP lease assignments and Dynamic DNS updates. A selection of icons and "folders" are provided to allow managers to create "virtual management groups" that can be customized by type, location, or geography.

## Reduce Configuration and Addressing Errors

IP AddressWorks validates the IP address and domain name by checking for syntax, then initiating “PING” for response. The centralized interface ensures that selections are made from an available address pool, thus avoiding conflicts. Also, configurations can be saved as a template and applied to additional servers. This simple procedure can save hours of troubleshooting time.

## Access Control

Access Control provides administrators with the option to delegate responsibility for IP management throughout the enterprise. IP AddressWorks Access Control provides the flexibility and fine granular control administrators need to protect their IP resources. Access Control can be used to define and enforce access policies on the operations users can perform in relation to network objects, the importing of network data, and the updating of servers. Rights are granted to users based on an address range and/or subnet.

## Installation and Deployment

IP AddressWorks has been designed for easy installation and deployment of your DNS and DHCP environment. DNSworks™, a unique domain analysis and optimization tool diagnoses and helps resolve DNS errors before they affect your network. IP AddressWorks also provides the most flexibility for simplified import and export of data.

## Domain Analysis with DNSworks

DNSworks lets you quickly and easily analyze your DNS domains and eliminate DNS errors that can interrupt your operation. DNSworks ensures DNS reliability by quickly identifying DNS configuration problems and recommending solutions. DNSworks identifies and resolves DNS errors that can affect end user connectivity, internal and external Web servers, and other critical network services. DNSworks allows you to avoid costly network downtime, improve network performance, ensure mail access, and assist in identifying potential security breaches.

## Import/Export

Data can be easily added from DNS/DHCP servers, spreadsheets, text files, or ARP tables. An automated indexing capability allows managers to organize large networks during DNS import by Class C address, domain, or individual folders. Text import dialog boxes make it easy to combine existing spreadsheet information, such as user name, asset, and other data with DNS and DHCP information.

IP AddressWorks import/export also allows management of any BIND-based DNS server or ISC-based DHCP server regardless of platform.

## IP AddressWorks Features

- Centralized control and management of IP addresses and DNS/DHCP servers
- LDAP directory-based architecture
- Access Control
- User friendly management interface
- DNSworks DNS analysis and optimization tool
- Dynamic DNS updates
- DHCP redundancy (Safe-failover)
- IP resources tracked across servers and subnets
- Drag and drop for single/group moves
- Extensive auditing and logging, flexible reporting
- Data import and export capability
- SNMP support
- Robust standards-based DNS and DHCP servers
- Support for NT, Sun Solaris, and OpenVMS-based DNS and DHCP servers

## Reliable, High-Performance Servers

IP AddressWorks provides industrial strength DNS and DHCP servers for Windows NT and Sun Solaris. It is also compatible with Process Software’s TCPware and MultiNet DNS/DHCP servers. These high-performance servers allow real-time updates between the servers and the user interface. Reliability is further enhanced by enabling continuous operation of the servers, even if the LDAP server is not available.

## Secure, Dynamic DNS

Dynamic DNS (DDNS) synchronizes DHCP and DNS, mapping the leased IP address to the DNS name, and vice versa. The DNS server then updates the data in the LDAP repository. Once data is updated, the DHCP lease address, the host name, and MAC address are linked, providing an immediate identification of the user. Thus, administrators gain dynamic management control of the address space.

IP AddressWorks DDNS (based on RFC 2136) is a standards-based implementation that supports any BIND 8.1 DNS server and any DDNS supporting DHCP server. IP AddressWorks also provides DNS security for dynamic updates. This capability lets administrators control which DHCP servers can update DNS servers, thus avoiding invasive updates from rogue DHCP servers.

### DHCP Safe-failover

Process Software's IP AddressWorks features the industry's first implementation of the DHCP Safe-failover protocol for DHCP redundancy. Process Software co-authored this proposed standard, working within the Internet Engineering Task Force (IETF) DHC Working Group. A redundant solution provides for back-up in case of failure to ensure continuous service. The Safe-failover protocol guarantees that unique DHCP leases are being provided, thus taking into account a potential situation where a network interruption and not a server failure is at fault.

### Integration with Third Party Applications

IP AddressWorks utilizes SNMP and LDAP communication protocols to allow for easy integration with third party applications. MIBs within the DNS and DHCP servers allow a wide range of activity and performance metrics to be trapped and reported.

### Recommended Minimum Requirements

(for 5,000 node network)

**Directory Server:** Processor: Pentium® 266 Mhz; Memory: 128 MB or higher; Available Disk Space: 200 MB; Windows NT® 4.0 Workstation or Server (Service Pack 4 or greater); or Solaris 2.6 and 7

**DNS and DHCP Servers:** Processor: Pentium® 266 Mhz; Memory: 64 MB or higher; Available Disk Space: 50 MB; Windows NT® 4.0 Workstation or Server (Service Pack 4 or greater) **or** MultiNet® 4.2 or TCPware® 5.4 TCP/IP for OpenVMS running on OpenVMS (VAX) 5.5.2 or greater, or OpenVMS (AXP) 6.0 or greater; or Solaris 2.6 and 7

**Management Interface:** Processor: Pentium® 266 Mhz; Memory: 128 MB or higher; Available Disk Space: 30 MB; Windows® 95 or 98, Windows NT® Workstation or Server (Service Pack 4 or greater)

**RFCs Supported:** DNS RFCs: 1035, 1183, 1664, 1996, 2052, 2136; DHCP RFCs: 0951, 1531, 1532, 1534, 1542, 2131, 2132

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### About Process Software Corporation

Process Software Corporation is a leader in providing directory-enabled IP management solutions and online services. Process Software's IP AddressWorks™ is an IP management solution that enables managers to gain control of their IP (Internet Protocol) infrastructure. This directory-enabled solution provides the foundation for e-business and advanced network services. Process Software also provides TCPware® and MultiNet®, two leading TCP/IP software packages for Compaq VAX and Alpha systems. Headquartered in Framingham, Massachusetts, the company is privately held, self-funded and profitable, supporting a world-wide installed base of more than 5,000 customers, including many Global 2000 companies.

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