Mac OS X Server Worksheet

Settings for the following server appear in the tables below:

Server:

Item	Description	Your information
Identity of remote server for installation and setup	For interactive installation and setup of a remote server on the local subnet, one of these values for the server: - IP address in IPv4 format (000.000.000.000) - host name (someserver.example.com) - MAC address (00:03:93:71:26:52). For command-line or remote-subnet installations and setups, the target server's IP address, in IPv4 format.	
Preset password (for remote installation and setup)	The first 8 digits of the target server's built-in hardware serial number, printed on a label on the computer. For older computers with no such number, use 12345678 for the password.	
Type of installation	Upgrade from the latest 10.3 version or from version 10.2.8, complete installation without disk formatting, or clean installation. The target volume (partition) is erased when you do a clean installation.	
Target disk or partition	Name of the target disk or partition (volume).	
Disk format (when erasing the disk is OK)	A format for the target disk. In most cases, use Mac OS Extended (Journaled). You can also use Mac OS Extended or case-sensitive HFS+.	
Disk partitioning (when erasing the disk is OK)	Indicate whether you want to partition the target disk. The minimum recommended size of a target disk partition is 4 GB.	

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RAID mirroring (when erasing the disk is OK and you have a second physical drive on the target server)	Indicate whether you want to set up RAID mirroring. The second disk is used automatically if the primary disk isn't available.	
	If the target disk has a single partition and the second physical drive has a single partition and no data, you can set up RAID mirroring after installation. However, to prevent data loss, set up RAID mirroring as soon as possible.	
Using saved setup data	If you want to use saved setup data to set up this server, identify the file or directory storing the data you want to use. If the data is encrypted, also identify the passphrase.	
	If you want to save settings in a file or directory, use one of the next two rows.	
Saving setup data in a file	Name the file using one of these options:	
	- <MAC-address-of-server>.plist (include any leading zeros but omit colons). For example, 0030654dbcef.plist.	
	- <IP-address-of-server>.plist. For example, 10.0.0.4.plist.	
	- <partial-DNS-name-of-server>.plist. For example, myserver.plist.	
	- <built-in-hardware-serial-number-of-server>.plist (first 8 characters only). For example, ABCD1234.plist.	
	- <fully-qualified-DNS-name-of-server>.plist. For example, myserver.example.com.plist.	
	- <partial-IP-address-of-server>.plist. For example, 10.0.plist (matches 10.0.0.4 and 10.0.1.2).	
	- generic.plist (a file that any server will recognize, used to set up servers that need the same setup values).	
	If you choose to encrypt the file, you can save the passphrase in a file named using the above conventions, except use the extension .pass, not .plist.	
	Place the file(s) in a location where the target server or servers can detect it. A server can detect files that reside on a volume mounted locally in /Volumes/*/Auto Server Setup/, where * is any device mounted under /Volumes.	

Item	Description	Your information
Saving setup data in a directory	Navigate to the directory where you want to save the setup, and name the setup record using one of these options:	
	- <MAC-address-of-server> (include any leading zeros but omit colons). For example, 0030654dbcef.	
	- <IP-address-of-server>. For example, 10.0.0.4.	
	- <partial-DNS-name-of-server>. For example, myserver.	
	- <built-in-hardware-serial-number-of-server> (first 8 characters only). For example, ABCD1234.	
	- <fully-qualified-DNS-name-of-server>. For example, myserver.example.com.	
	- <partial-IP-address-of-server>. For example, 10.0 (matches 10.0.0.4 and 10.0.1.2).	
	- generic (a file that any server will recognize, used to set up servers that need the same setup values).	
	If you choose to encrypt the file, you can save the passphrase in a file named using the above conventions, except add the extension .pass. Place the passphrase file in a location where the target server or servers can detect it. A server can detect the file if it resides on a volume mounted locally in /Volumes/*/Auto Server Setup/, where * is any device mounted under /Volumes.	
Language	The language to use for server administration (English, Japanese, French, or German). The language affects the server's time and date formats, displayed text, and the default encoding used by the AFP server.	
Keyboard layout	The keyboard for server administration.	

Item	Description	Your information
Serial number	The serial number for your copy of Mac OS X Server. The format of the server serial number is xsvr-999-999-x-xxx-xxx-xxx-xxx-xxx-xxx-x, where x is a letter and 9 is a digit. The first element (xsvr) and the fourth one (x) must be lower case.	
	Unless you have a site license, you need a unique serial number for each server. You'll find the server software serial number printed on the materials provided with the server software package.	
	If you have a site license, a registered owner name and organization must be entered exactly as specified by your Apple representative.	
	If you set up a server using a generic setup file or directory record and the serial number isn't site licensed, you must enter the server's serial number using Server Admin.	
Administrator's long name (sometimes called full name or real name)	A long name can contain no more than 255 bytes. The number of characters ranges from 255 Roman characters to as few as 85 3-byte characters. It can include spaces. It can't be the same as any predefined user name, such as System Administrator. This name is case sensitive in the login window, but not when accessing file servers.	
Administrator's short name	A short name can contain as many as 255 Roman characters, typically eight or fewer. Use only a through z, A through Z, 0 through 9, _ (underscore), or - (hyphen). Avoid short names that Apple assigns to predefined users, such as "root."	
Administrator's password	This value is case sensitive and must contain at least 4 characters. It is also the password for the root user.	
	If you record this value, be sure to keep this worksheet in a safe place.	
	After setup, use Workgroup Manager to change the password for this account.	

Item	Description	Your information
Host name	You can't specify this name during server setup. Server Assistant sets the host name to AUTOMATIC in /etc/hostconfig. This setting causes the server's host name to be the first name that's true in this list: - The name provided by the DHCP or BootP server for the primary IP address - The first name returned by a reverse DNS (address-to-name) query for the primary IP address - The local hostname - The name "localhost"	
Computer name	The AppleTalk name and the default name used for SLP/DA. Specify a name 63 characters or fewer but avoid using =, :, or @. The Network browser in the Finder uses SMB/CIFS to find computers that provide Windows file sharing. Spaces are removed from a computer name for use with SMB/CIFS, and the name can contain no more than 15 characters, no special characters, and no punctuation.	
Local hostname	The name that designates a computer on a local subnet. It can contain lower-case letters, numbers, and/or hyphens (but not at the ends). The name ends with ".local" and must be unique on a local subnet.	
Network interface data	Your server has a built-in Ethernet port and may have an additional Ethernet port built in or added on. Record information for each port you want to activate.	Use the table provided later in this worksheet to record data for each port.
Directory usage	Select one: - Standalone Server (use only the local directory). - Connected to a Directory System (get information from another server's shared directory). If you choose this option, use one of the next four rows in this table to indicate how the server will connect with the directory. - Open Directory Master (provide directory information to other computers). If you choose this option, use the row for "Using Open Directory Master." - No change (for upgrades only).	
Using "As Specified by DHCP Server"	The directory to use will be identified by a DHCP server set up to provide the address and search base of an LDAP server (DHCP option 95) or the address and tag of a legacy NetInfo server.	

Item	Description	Your information
Using "Open Directory Server"	The directory to use will be an LDAP directory identified by a DHCP server or identified by specifying an IP address or domain name for the LDAP server.	
Using "NetInfo Server"	The directory to use will be a NetInfo parent directory on an existing Apple server. Choose one or more ways to locate that directory: - Broadcast - DHCP - Static IP Address (specify IP address and NetInfo tag)	
Using "Other Directory Server"	The directory or directories to use will be configured using the Directory Access application after you're finished setting up the server.	
Using "Open Directory Master"	Optionally indicate you want to enable a Windows Primary Domain Controller on the server. Provide a Windows computer name and domain for the server. The computer name and domain can contain a-z, A-Z, 0-9, -, but no . or space and can't contain only numbers. Finish setting up the directory you want to host by using Server Admin after completing server setup.	
Automating service startup	Indicate whether you want any of the following to start automatically every time the server starts; these items need no additional configuration to be useful: Apple file service Apple Remote Desktop FTP service iChat service Mail service NetBoot service Network time service QuickTime Streaming service Software update service Web service WebDAV service Weblog service Windows file service Xgrid Agent service Xgrid Controller service	
Time zone	Choose the time zone you want the server to use.	
Network time	Optionally indicate a Network Time Server for the server. Apple recommends that you keep your server's clock accurate by synchronizing it with a network time server.	

Configuration settings for the following port appear in the table below:

Port Name: Built-in Ethernet

Item	Description	Your information
Device name	A UNIX name for the port in the format en*x*, where *x* starts with 0. See your hardware manual for the value of *x* for the port you're describing. The value en0 always designates a built-in Ethernet port.	en0
Ethernet address	The Media Access Control (MAC) address of the port (00:00:00:00:00:00). This value is usually on a sticker on the server hardware, but you can run Apple System Profiler or a command-line tool such as networksetup to discover the value.	
TCP/IP and AppleTalk	Indicate whether you want to enable the port for TCIP/IP and/or AppleTalk. You can connect a port to the Internet by enabling TCP/IP and use the same or a different port for AppleTalk. Enable no more than one port for AppleTalk.	
Order of ports	If you enable more than one port, indicate the order in which the ports should be accessed when trying to connect to a network. All non-local network traffic uses the first active port.	
TCP/IP settings	Use one of the next four rows in this table.	
"Manually"	Specify these settings if you want to manually specify TCP/IP settings: - IP address (000.000.000.000). A unique static address. - Subnet mask (000.000.000.000). Used to locate the subnet on the local area network where the server resides. This mask is used to derive the network part of the server's address; what remains identifies the server computer on that network. - Router (000.000.000.000) that supports the subnet the server's on. The router is the machine on the local subnet to which messages are sent if the target IP address isn't on the local subnet. - DNS servers (000.000.000.000) used to convert IP addresses to fully qualified DNS names and vice versa for the port. - Search domains (optional). Names to automatically append to Internet addresses when you don't fully qualify them. For example, if you specify campus.univ.edu as a search domain, you can type server1 in the Finder's Connect To Server dialog box to connect to server1.campus.univ.edu.	

Item	Description	Your information
"Using DHCP with Manual IP address"	Specify these settings if you want to use a DHCP server to assign a static IP address and optionally other settings for the port. Make sure the DHCP server is already set up and DHCP service running when you initiate server setup: - IP address (000.000.000.000). A unique static address. - DNS servers (000.000.000.000) used to convert IP addresses to fully qualified DNS names and vice versa for the port. - Search domains (optional). Names to automatically append to Internet addresses when you don't fully qualify them. For example, if you specify campus.univ.edu as a search domain, you can type server1 in the Finder's Connect To Server dialog box to connect to server1.campus.univ.edu.	
"Using DHCP"	Specify these settings if you want to use a DHCP server to assign a dynamic IP address and optionally other settings for the port. Make sure the DHCP server is already set up and DHCP service running when you initiate server setup: - DHCP client ID (optional). A string that's useful for recognizing a port when its IP address changes. Don't specify a DHCP client ID when using Server Assistant to set up the server remotely. Instead, after setup, use the server's Network preferences to define a DHCP client ID. - DNS servers (000.000.000.000) used to convert IP addresses to fully qualified DNS names and vice versa for the port. - Search domains (optional). Names to automatically append to Internet addresses when you don't fully qualify them. For example, if you specify campus.univ.edu as a search domain, you can type server1 in the Finder's Connect To Server dialog box to connect to server1.campus.univ.edu.	
"Using BootP"	Specify these settings if you want to use a Bootstrap Protocol server to assign an IP address for the identified port. With BootP, the same IP address is always assigned to a particular network interface. It's used primarily for computers that start up from a NetBoot image: - DNS servers (000.000.000.000) used to convert IP addresses to fully qualified domain names and vice versa for the port. - Search domains (optional). Names to automatically append to Internet addresses when you don't fully qualify them. For example, if you specify campus.univ.edu as a search domain, you can type server1 in the Finder's Connect To Server dialog box to connect to server1.campus.univ.edu.	

Item	Description	Your information
IPv6	To configure IPv6 addressing for the port, select Automatically or Manually.	
	Choose Automatically if you want the server to automatically generate an IPv6 address for the port.	
	Choose Manually to specify IPv6 settings:	
	- IPv6 address. Generally written in the form 0000:0000:0000:0000:0000:0000:0000:0000.	
	- Router. The IPv6 address of the router on the local subnet.	
	- Prefix length. The number of significant bits in the subnet mask that are used to identify the network.	
Ethernet settings	To automatically configure Ethernet settings for the port, choose Automatically.	
	You may want to choose Manually (Advanced) to specify settings if you have specific requirements for the network the server's connected to. Note that incorrect Ethernet settings can affect network performance or render a port unusable:	
	- Speed. The maximum Ethernet speed, in number of bits per second, that can be transmitted using the port. Select one of these options: autoselect, 10baseT/UTP, 100baseTX, and 1000baseTX.	
	- Duplex. Determine whether input and output packets are transmitted at the same time (full-duplex) or alternately (half-duplex).	
	- Maximum Packet Size (MTU). The largest packet the port will send or receive. MTU stands for maximum transfer unit, expressed in bytes. Increasing the packet size improves throughput, but the devices that receive the packet (switches, routers, and so forth) must support the packet size. Select one of these options: Standard (1500), Jumbo (9000), or Custom (enter a value from 72 to 1500).	

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Device name	A UNIX name for the port in the format en*x*, where *x* starts with 0. See your hardware manual for the value of *x* for the port you're describing. The value en0 always designates a built-in Ethernet port.	
Ethernet address	The Media Access Control (MAC) address of the port (00:00:00:00:00:00). This value is usually on a sticker on the server hardware, but you can run Apple System Profiler or a command-line tool such as networksetup to discover the value.	
TCP/IP and AppleTalk	Indicate whether you want to enable the port for TCIP/IP and/or AppleTalk. You can connect a port to the Internet by enabling TCP/IP and use the same or a different port for AppleTalk. Enable no more than one port for AppleTalk.	
Order of ports	If you enable more than one port, indicate the order in which the ports should be accessed when trying to connect to a network. All non-local network traffic uses the first active port.	
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	- IPv6 address. Generally written in the form 0000:0000:0000:0000:0000:0000:0000:0000.	
	- Router. The IPv6 address of the router on the local subnet.	
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	You may want to choose Manually (Advanced) to specify settings if you have specific requirements for the network the server's connected to. Note that incorrect Ethernet settings can affect network performance or render a port unusable:	
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