Registry Guide

iPlanet Application Server

Version 6.0

816-2588-10
October 2001

Contents

iPlanet Application Server Registry

The registry for iPlanet Application Server 6.0 contains all the information required to configure and troubleshoot an installed iPlanet Application Server. This document describes parameters in the registry, listed by program section or module.

The registry is a tree of nodes called keys. Each key has a name and is associated with zero or more values and zero or more subkeys. Each value has a name and is associated with a type and a single value of that type. A registry key maps to an LDAP entry, and a registry value maps to an LDAP attribute.

There are 20+ keys stored in the directory server, and this mapping information is stored in the local registry under `GDS\Subtreemaps`. Therefore, any module accessing a mapped GDS subtree transparently accesses the LDAP back end.

Table 1 Registry parameters stored in the Directory Server

Configuration Settings	See This Section	Definitions
ClassDef	“Using the Registry to Debug Components,” on page 12	All the registered applications that all iPlanet Application Server machines use.
NameTrans	“Using the Registry to Debug Components,” on page 12	The list of user-specified names for all applications registered to the iPlanet Application Server and the corresponding GUIDs.
Clusters	“Cluster Parameters,” on page 18	The iPlanet Application Server cluster and the servers within the cluster.
6.0\ACL	“Security Parameters,” on page 61	The list of access control lists (ACLs) used by iPlanet Application Server.

Table 1 Registry parameters stored in the Directory Server *(Continued)*

Configuration Settings	See This Section	Definitions
6.0\PRINCIPAL	"Security Parameters," on page 61	The user and group security information for all installed iPlanet Application Server machines.
6.0\EJB-Components	"EJB-Components Parameters," on page 31	Contains the names and GUIDs for Enterprise Java Beans.
6.0\GMS	"GMS Parameters," on page 70	The Global Message Service (GMS) multicasting parameters. Used for load balancing.
6.0\NLS	"National Language Support Parameters," on page 72	The international environment settings for National Language Support.
6.0\CCS0\DAE\ DataSources	"Database Parameters," on page 23	The list of constant flags for each driver and the associated configuration settings for each flag.
6.0\CCS0\DAE2\ DataSources	"Database Parameters," on page 23	(JDBC) The list of constant flags for each driver and the associated configuration settings.
6.0\CCS0\DAE3\ DataSources	"Database Parameters," on page 23	(JDBC) The list of constant flags for each third party driver and the associated configuration settings. Up to three third party drivers can be registered with the application server.
6.0\CCS0\EB	"EB Parameters," on page 29	The list of parameters that control Entity Bean management.
6.0\CCS0\ EXTENSIONS (Unix) 6.0\CCS0\Extensions (Windows)	"Extensions Parameters," on page 36	The extensions that are loaded into the iPlanet Application Server installation when the servers are started.
6.0\CCS0\LOADB	"Load Balancing Parameters," on page 44	The load-balancing parameters that control how requests are balanced.

Table 1 Registry parameters stored in the Directory Server *(Continued)*

Configuration Settings	See This Section	Definitions
6.0\CCS0\REQ	"Component Request Manager and Path Parameters," on page 57	The Request Manager settings used to configure threads in the thread pool.
6.0\CCS0\Security	"Security Parameters," on page 61	The encryption parameters (used only with encryption extension).

Table 2 Registry parameters stored in the (reg.dat) local registry

Configuration Settings	See This Section	Definitions
ClassImp	"Using the Registry to Debug Components," on page 12	Contains all the registered components that iPlanet Application Server uses.
GDS	Introductory paragraph of this document.	Contains a mapping to values stored in the Directory Server.
NameTrans	"Using the Registry to Debug Components," on page 12	Contains a list of user-specified names for all components registered to your iPlanet Application Server and their corresponding GUIDs (globally unique identifiers).
6.0\Top-level parameters	"Top-Level (6.0) Parameters," on page 15	Contains iPlanet Application Server installation and application directory information.
6.0\Admin	"Administration Parameters," on page 16	Contains Administration parameters for the Application Server.
6.0\CCSO\CGI	"CGI Parameters," on page 21	No longer supported.
6.0\CCS0\CONN	"CONN Parameters," on page 21	Parameters for thread connection.
6.0\CCS0\ClusterName	"Cluster Parameters," on page 18	Contains the name of the server cluster.

Table 2 Registry parameters stored in the (reg.dat) local registry *(Continued)*

Configuration Settings	See This Section	Definitions
6.0\CCS0\ENG	"Engine Parameters," on page 31	Engine parameters define the runtime model of the various iPlanet Application Server engines.
6.0\CCS0\EVENTS	"EVENTS Parameters," on page 33	Contains application events registered with an older version of the iPlanet Application Server.
6.0\CCS0\EVENTS2	"EVENTS2 Parameters," on page 34	Contains application events registered using AppLogic in iPlanet Application Server APIs.
6.0\CCS0\HTTPAPI	"HTTPAPI Parameters," on page 37	Contains information used by the Web Connector to communicate with iPlanet Application Server.
6.0\CSS0\HTTPLOG	"HTTPLOG Parameters," on page 43	Contains the host and port number of the web server being logged, and the input variables that trigger an HTTPLOG log entry.
6.0\CCS0\LOGGING	"Logging Parameters," on page 51	Allows you to control the ability to log iPlanet Application Server messages and HTTP Web server messages.
6.0\CCS0\MSGDB	"MSGDB Parameters," on page 54	Used for localization, this value contains the location of the data file for messages.
6.0\CSS0\POOLS	"POOLS Parameters," on page 55	Parameters for third party database pooling.
6.0\CCS0\QUERY	"Component Request Manager and Path Parameters," on page 57	List of root paths that iPlanet Application Server uses to find and load SQL query files (.gxq).
6.0\CCS0\ RESOURCEMGR	"RESOURCEMGR Parameters," on page 56	Parameters of Resource Manager connecting to the database backends.
6.0\CCS0\ SYSTEM_JAVA	"Component Request Manager and Path Parameters," on page 57	List of root paths that the KJS uses to find and load components.

Table 2 Registry parameters stored in the (reg.dat) local registry *(Continued)*

Configuration Settings	See This Section	Definitions
6.0\CCS0\State	"State Parameters," on page 61	The host and IP address of the executive server.
6.0\CCS0\TEMPLATE	"Component Request Manager and Path Parameters," on page 57	List of paths that the runtime server uses to find and load template files.
6.0\CCS0\TXNMGR	"TXNMGR Parameters," on page 66	Parameters for Transaction Manager logs.
6.0\DataSource	"DataSource Parameters," on page 67	List of all data sources registered with the Application Server.
6.0\Deployment	"Deployment Parameters," on page 68	Contains settings for the Deployment Management tool.
6.0\J2EE-Application	"J2EE-Application," on page 71	Contains ACL role names and application paths for all J2EE applications registered with the Application Server.
6.0\J2EE-Module	"J2EE-Module," on page 71	Contains meta-information about modules registered with the Application Server. Do not modify System and Boot keys.
6.0\Java (Windows only)	"Java Parameters," on page 71	List of paths to java classes, libraries and JVM. You can also set java arguments to send to the java engine at startup.
6.0\IASAT	"IASAT Parameters," on page 73	Contains login and preference information for the Administration tool.
6.0\jndiConfig	"jndiConfig Parameters," on page 75	List of JNDI handles for namespaces.
Debugging Parameters	"Debugging Parameters," on page 75	This section of the document tells you where to set debugging parameters in various sections of the registry to obtain log entries during testing.

All parameters listed in this document are found in the registry under the following area:

Windows NT
`HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\`

UNIX
`\SOFTWARE\iPlanet\`

Windows NT
For Windows NT, type `kregedit` at the command line or use the Windows `regedit` or `regedt32` commands to open the registry.

Unix
For UNIX, type `kregedit` at the command line to open the registry.

Using the Registry to Debug Components

Note that when you register components (servlets and EJBs), the following three sections of the registry are updated:

- ClassDef
- ClassImp
- NameTrans

NameTrans parameters consist of a list of user-specified names for all components registered to your iPlanet Application Server and their corresponding GUIDs (globally unique identifiers). ClassDef and ClassImp parameters are described on page 13 and page 14 of this document.

These values can be modified through the application screen of the Administration tool. It is generally not necessary to manually edit the registry.

When developers write code outside of the iPlanet Application Builder environment, they must register the GUID for their components. Developers use `iasdeploy` to register components.

NOTE If you get a `GXBinder` error when running components, start by reviewing these three areas of the registry to debug the problem.

ClassDef Parameters

The ClassDef section contains all the registered components that your installation of iPlanet Application Server uses. Each GUID (globally unique identifier) describes an application component or module registered with the system. If a component is properly registered with iPlanet Application Server, there is a corresponding ClassDef entry.

There may be a GDS (global directory service) folder under ClassDef. The GDS folder is present when the component is load balanced to more than one server. Beneath each folder, there is a subfolder called GDS. Each entry in the GDS key is the location of the iPlanet Application Server that hosts this component. The format is as follows:

IP:port number= [is sticky |is enabled].

An IP address of 127.0.0.1 implies that the component is local to the server.

An IP address of 255.255.255.255 implies that the component is global (meaning that the component can run on all iPlanet Application Server servers). A setting of 255.255.255.255 cannot be set through the administration tool.

Other IP address values imply that a component is distributed (load balanced) among the iPlanet Application Server servers. If `is_enabled=1`, the component is enabled on the server. If `is_sticky=0x80000001`, the component is sticky load balanced. If `is_sticky=0x00000001`, the component is not sticky load balanced.

All registered components are listed under the following area:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\ClassDef
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\ClassDef
```

A registered component is represented in the registry using its GUID (globally unique identifier).

Table 3 Registry ClassDef parameters

Parameter	Description	Acceptable Values
GUID	The globally unique identifier that represents a component.	A valid GUID, for example: {019348e1-3cf3-11d194f9-0060974036d0}

Table 3 Registry ClassDef parameters *(Continued)*

Parameter	Description	Acceptable Values
GUID\GDS	The locations (host IP address and KXS port number) of the servers where the component is distributed.	A list of one or more host IP addresses and port numbers. For example: 126.129.8.120:10818 126.129.8.124:10818 An IP address of 127.0.0.1 implies that the component is not distributed and executes locally without being load balanced to another server. Note that each member of the list has an associated value comprised of one or more of the following flags (a logical OR of one or more of the following flags): ENABLED - 0x00000001 (enable component) ENCRYPT - 0x00000002 (component parms are encrypted between the Web server and iPlanet Application Server) STICKYLB - 0x80000000 (component is sticky) If the component is enabled and sticky, the value should be: -2147483647 If the component is encrypted and sticky the value should be: -2147483646 If the component is enabled, encrypted and sticky, the value should be: -2147483645

ClassImp Parameters

The ClassImp section, like the ClassDef section, contains all the registered components that your iPlanet Application Server uses. The component attributes contained in this section are server-specific, as opposed to the ClassDef section, which contains global attributes that apply across iPlanet Application Servers. All the parameters described in this section are available under the following area of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\ClassImp\GUID #\1.0
```

UNIX

`\SOFTWARE\iPlanet\Application Server\6.0\ClassImp\`*`GUID #`*`\1.0`

Table 4 Registry ClassImp parameters

Parameter	Description	Acceptable Values
100	The name of the component.	A valid component name represented as a string. For example: `"AppLogic FindCust"`
1000	The name of the Java class that implements the component package information.	Valid Java package information. For example: `"GXApp.OnlineBank.FindCust"`
1100	The path on your iPlanet Application Server directory where the component is stored.	A valid directory path. For example: `"GXApp\OnlineBank\FindCust.Class"`
120	The name of the application.	An application name. For example: `"OnlineBank"`
300	The ACL associated with the component.	Use `kreg` to create ACLs for components.
Type	The type of component (Java, C++).	A component type. **1000** - Java component **3000** - C++ component

Top-Level (6.0) Parameters

Parameters directly under the 6.0 section of the registry contain iPlanet Application Server installation and application directory information.

All the parameters described in this section are available under the following area of the registry:

Windows NT

`HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0`

UNIX

`\SOFTWARE\iPlanet\Application Server\6.0`

Table 5 Registry top-level (6.0) parameters

Parameter	Description	Acceptable Values
AppPath	Contains the directory path for applications registered with the Application Server.	example: `c:\iPlanet\ias\APPS`
BasePath	Contains the directory path for the installed Application Server.	`c:\iPlanet\ias`
ModulesDirName	The directory name that contains application modules registered with the Application Server. This directory must be located within the directory specified in the AppPath parameter.	modules

Administration Parameters

The Admin section of the registry contains Administration parameters for the Application Server. Most of these values can be set using the Administration Tool.

All the parameters described in this section are available under the following area of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\Admin
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\Admin
```

Table 6 Registry Admin parameters

Parameter	Description	Acceptable Values
AutoStart	Enables or disables AutoStart of the Application Server in the event of an engine failure.	0 (off) 1 (on) Default is 1
DisableEntWideAdminFromHere	Enables or disables administration of the Application Server from the current machine.	0 (off) 1 (on) Default is 0

Table 6 Registry Admin parameters *(Continued)*

Parameter	Description	Acceptable Values
DisableSnmp (Unix only)	Enables or disables SNMP.	0 (off) 1 (on) Default is 1
EngineConnRetries	Determines the number of times the engine tries to reconnect after failure.	Default is 10
EngineMaxRestarts	Determines the number of times the engine attempts to restart after initial failure.	Default is 10
HeartbeatInterval	Amount of time in seconds between checks to ensure the engine is connected and running.	Default is 10
Host	The IP address assigned to the Application Server.	A valid IP address.
MailRecipients	Email addresses of persons to receive administrative notification of events.	Semi-colon separated list of email addresses.
MailServer	The mail server where administrative notification originates.	A valid IP address or mail server domain name.
Notify KCS crashed	Enables or disables the creation of a log entry when the KCS engine crashes.	0 (off) 1 (on) Default is 0
Notify KJS crashed	Enables or disables the creation of a log entry when the KJS engine crashes.	0 (off) 1 (on) Default is 0
Notify KXS crashed	Enables or disables the creation of a log entry when the KXS engine crashes.	0 (off) 1 (on) Default is 0
NotifyAbnormalClusterStatus	Enables or disables the creation of a log entry when the Cluster has reached an abnormal status.	0 (off) 1 (on) Default is 0

Table 6 Registry Admin parameters *(Continued)*

Parameter	Description	Acceptable Values
NotifyEngineMaxRestarts	Enables or disables the creation of a log entry when the iPlanet Application Server engine has reached the maximum number of restart attempts.	0 (off) 1 (on) Default is 0
Port	The port number registered to the application server.	A port number. The default port number is 10817.
RedirectLogBaseDir	Specifies a path to redirect the logging to a backup directory.	Any valid directory path name
Script	A script to run when an administrative notification is warranted.	A directory path with specified script name. pageme.csh or notify.bat
ServerStopTimeout	Amount of time the Application Server is allowed to remain idle before shutting down.	Default is 60
recvdir	This value is not used by the application server. Reserved for future development.	No value by default

Cluster Parameters

Cluster management is handled using several cluster-related parameters located in the Clusters and CCS0 sections of the registry.

These values can be modified from the General screen, cluster tab of the Administration tool. Planning clusters prior to installation and allowing the installation to create them is recommended.

NOTE After modifying cluster information, you must restart the cluster for the new settings to take effect.

Clusters section

The Clusters section lists, among other things, all the clusters you have created on your network and the servers within each cluster. You can add servers to a cluster by going into the registry and adding a server IP address to the list. You can also use the Administration Tool.

The cluster parameters are available under the following area in the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\Clusters
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\Clusters
```

Table 7 Registry Clusters parameters

Parameter	Description	Acceptable Values
Name of Cluster\ MaxBackups	The maximum number of Sync Backups in the cluster.	**0** - No Sync Backups **1** - One Sync Backup *n* - *n* Sync Backups The upper limit is one less than the maximum number of machines in the cluster.
Name of Cluster\ MaxHops	Not used.	
Name of Cluster\ MaxSyncHeartBeat	Stops heartbeat messages from being sent to other engines if the count of heartbeat messages has exceeded this maximum.	Number of seconds, default is 10
Name of Cluster\ SyncHeartBeatInterval	The time between two heartbeat messages sent from one server to another.	Number of seconds, default is 30
Name of Cluster\ SyncTimerInterval	The interval at which deleted nodes are garbage collected.	Number of seconds, default is 60

Table 7 Registry Clusters parameters *(Continued)*

Parameter	Description	Acceptable Values
Name of Cluster\ SyncServers	The data synchronization servers within the cluster. This folder must contain the exact same information for each server in the cluster. If you are not sharing the same LDAP server for each server in the cluster, check this folder on all servers for inconsistencies when the cluster is not working properly.	A list of valid IP addresses, port numbers, and priorities. For example: 192.168.1.61:10502=1 192.168.1.61:10802=2
Name of Cluster\ SyncPersChunkSz	Not used.	
Name of Cluster\ AutoRestartServerFor SplitPrimaries	If this key is set to `1` and a split primary is detected, the Application Server instance that has lower priority is restarted.	`0` or `1`, default is `0`

CCS0 section

The cluster related parameters in the CCS0 (Current Control Set Zero) section of the registry allow you to map the synchronizer to clusters. You map the `ClusterName` key of each synchronizer to the name of a cluster. If the cluster name is set, the synchronizer communicates with the servers in that cluster. Servers within a cluster are listed under the *Name of Cluster*`\SyncServers` parameter described in the Cluster section table above.

The synchronizer parameters are available under the following area in the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\CCS0
```

Table 8 Registry CCSO Cluster-related parameters

Parameter	Description	Acceptable Values
ClusterName*default*	The default cluster to which all participating data synchronizers are mapped. All such servers only list themselves under the Default cluster, so each registry on each server machine must be updated to list all the other servers in the cluster. This key contains the value for each cluster on your network. The name for the value is the name of the cluster.	If necessary, rename *default* to the name of the cluster to which the synchronizer should connect. By default, if you specify no clusters during installation, the system creates a cluster called *machine_name*-NoDsync.

CGI Parameters

The CGI parameters in the registry are not supported in iPlanet Application Server versions 4.*x* and 6.*x*.

All the variables listed here are available under the following area of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\CGI\INPUTVARS
```

UNIX

```
SOFTWARE\iPlanet\Application Server\6.0\CCS0\CGI\INPUTVARS
```

CONN Parameters

This section of the registry contains information pertaining to the Web Connector plug-in.

All the parameters described in this section are available under the following area:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\CONN
```

UNIX

`\SOFTWARE\iPlanet\Application Server\6.0\CCS0\CONN`

Table 9 Registry CCS0\CONN parameters

Parameter	Description	Acceptable Values
Host	The host IP address of the primary Application Server.	A valid IP address. A server cluster must be created.
PingTimeout	The UDP ping timeout.	Number of seconds, typical value is `5`, default is `3`.
PingRetries	Number of UDP Ping retries.	Default is `1`
RecvTimeout	The socket receive timeout.	Number of seconds, default is `10`
DisableEcho	Disables connection checking if set to `1`. If set to `0`, the plugin verifies if the KXS is alive by sending a UDP Ping before sending the request to the KXS.	`0` or `1` Set this key to `1` if the security administrators of a deployment site discourage UDP traffic between the Web server and the KXS.
DebugLevel	Sets the debugging level for connection logging. This key is not present by default.	1 logs information about new connections and connection close. 2 and 3 logs information about activity and checks if other machines in the cluster are active. 4 logs information about every packet sent and received. This is the maximum value.

Database Parameters

The iPlanet Application Server registry contains several parameters that affect database configuration. When setting up a new database client, you can manipulate the driver configurations and database connections via the registry.

The Database screen of the Administration tool provides an interface to these sections of the registry. You can use the Administration tool to change the priority of a database, change the location of the client library, to enable logging and to configure database connection pooling settings. You may want to edit the registry manually to change the debugging parameters or to enable extra logging of debug messages for analyzing database problems.

The following areas of the registry pertain to database configuration issues:

- DataSources
- Drivers
- The specific database driver configuration parameters

The POOLS area also affects database configuration; see “POOLS Parameters,” on page 55.

All the parameters described in this section are available under the following areas of the registry. The `DAE` section is not used for new iPlanet Application Server version 6.0 applications.

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\DAE
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\DAE2
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\DAE3
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\CCS0\DAE
\SOFTWARE\iPlanet\Application Server\6.0\CCS0\DAE2
\SOFTWARE\iPlanet\Application Server\6.0\CCS0\DAE3
```

DataSources

DataSources provides a mapping of a datasource name to a particular driver. The user-defined logical name of a datasource is used by a component to open a connection to the datasource. Each datasource has its own parameter in the registry that determines the driver it uses. You can apply one of the following string values, representing a driver, to a datasource:

- "INFORMIX_CLI"
- "ORACLE_OCI"
- "DB2_CLI"
- "SYBASE_CTLIB"
- "ODBC"

The following parameters control the logging of server events to a database. You can set them with the Administration Tool on the Logging page by using the Server Events tab.

Table 10 Registry CCS0\DataSources parameters

Parameter	Description	Acceptable Values
DataSources\eventlog	The datasource mapping for event logging of the Application Server.	The type of a registered database driver. Example: ORACLE_OCI for Oracle, INFORMIX_CLI for Informix.
DataSources\httplog	The datasource mapping for HTTP logging of the Web Server.	The type of a registered database driver. Example: ORACLE_OCI for Oracle, INFORMIX_CLI for Informix.
DataSources\ksample	The datasource mapping of the database table where logging information is sent.	The type of a registered database driver. Example: ORACLE_OCI for Oracle, INFORMIX_CLI for Informix.

Drivers

Each driver has a constant flag number value:

- GX_DA_DRIVER_ODBC = 1
- GX_DA_DRIVER_ORACLE_OCI = 16
- GX_DA_DRIVER_SYBASE_CTLIB = 32
- GX_DA_DRIVER_INFORMIX_CLI = 128
- GX_DA_DRIVER_DB2_CLI = 256
- GX_DA_DRIVER_MICROSOFT_SQL = 64
- GX_DA_DRIVER_DEFAULT = 32769
- GX_DA_DRIVER_ANY = 2147483647

GX_DA_DRIVER_DEFAULT looks for a match in the data sources. If an exact match is not found, it tries each of the data sources in order of database priority. Also, if GX_DA_DRIVER_ANY is used, all the configured drivers are evaluated for a match, in database priority order, to attempt a database connection.

Associated with each flag number are the following registry parameters, located under the DRIVERS parameter:

- ENABLE determines whether the driver is enabled (1) or disabled (0).
- GUID, or global unique ID, is a unique number. You should never change this number. It maps the iPlanet Application Server driver module that runs on top of the database vendor's driver module.
- LIBRARY is the client library DLL file name. This is the database vendor's file name, for example `db2cli.dll`. The only reason to change it would be if you receive an update from the vendor and the file has a different name.
- NAME is used for console logging messages. This is the prefix that is printed with error messages coming from the Data Access Driver (DAD) code. You should set this value to what ever the driver name is. So, for example, the value for the DB2 driver would be DB2_CLI.
- PRIORITY is the database connectivity priority number. When you install iPlanet Application Server, you are asked to rank your installed databases in order of connectivity priority: 99 is the highest priority, 0 is the lowest. This is the priority used to determine the order in which your applications attempt to

connect to the databases installed on your system. If you don't specify a driver for a datasource, the Default driver flag argument is used. If this is not specified, the database connectivity priority number determines which database client is used.

Driver-Specific Registry Parameters

The drivers are listed as follows in the registry:

- DB2_CLI
- INFORMIX_CLI
- ODBC
- ORACLE_CLI
- SYBASE_CTLIB

Each driver has the following parameters:

Table 11 Registry CCS0\DAE and DAE2 driver-specific registry parameters

Parameter	Description	Acceptable values
LogicalNull	Zero values are displayed as NULL values if LogicalNull is set to 1.	**0** - Disabled. **1** - Enabled.
DAE2\IS3PJDBC	When this parameter is enabled, the driver is a third-party database driver.	**0** - Disabled. **1** - Enabled.
CacheCleanInterval	Time between the execution of the database connection cache cleaner thread.	Number of seconds greater than 0, default is `120`.
CacheConnTimeOut	Idle time after which a connection is evicted from the cache.	Number of seconds greater than 0, default is `120`.
CacheDebugMsgs	Enables the Data Access Engine (DAE) to output debug log messages for each of the supported drivers (ODBC, DB2_CLI, INFORMIX_CLI, ORACLE_OCI, and SYBASE_CTLIB). The number in parenthesis at the end of the debug messages is the connection number to which the message applies.	**0** - Turns off debugging (default). **1** - Turns on debugging.

Table 11 Registry CCS0\DAE and DAE2 driver-specific registry parameters *(Continued)*

Parameter	Description	Acceptable values
CacheFreeSlots	The maximum number of connections (used and unused) that can be cached at any given time.	A value greater than or equal to 0, default is `16`.
CacheInitSlots	Set it to the same value as CacheFreeSlots. Will be obsoleted.	A value greater than 0, default is `64`.
CacheMaxConn	The maximum number of connections allowed to a data source at a time.	A value greater than 0, default is `64`.
ConnBackOffFactor	Not used.	
ConnGiveUpTime	The amount of time allowed for attempting to create a database connection. If the time is exceeded, the connection attempt is aborted and an error is returned.	Number of seconds greater than 0, default is `60`.
RMThreadMax	The maximum number of threads allocated for the DAE's asynchronous query request manager.	A value greater than 0, default is `32`.
RMThreadMin	The minimum number of threads allocated for the DAE's asynchronous query request manager. This minimum number is pre-allocated by the iPlanet Application Server.	A value greater than 0, default is `0`.
RSBufferInitRows	The number of rows to be fetched from the database in a single query (a single ResultSet `fetchNext()` operation).	A value greater than 0, default is `25`.
RSBufferMaxRows	The maximum number of rows to buffer, when ResultSet buffering is active. The buffer size may not exceed RSBufferMaxSize bytes. After the ResultSet buffer is full, buffering is deactivated and a status indicating this is returned by the `fetchNext()` method. (Applies to a single KJS/KCS engine.)	A value greater than 0, default is `100`.

Table 11 Registry CCS0\DAE and DAE2 driver-specific registry parameters *(Continued)*

Parameter	Description	Acceptable values
RSBufferMaxSize	The maximum size to buffer when ResultSet buffering is active. The buffer can contain only RSBufferMaxRows number of rows. After the ResultSet buffer is full, buffering is deactivated and a status indicating this is returned by the fetchNext() method. (Applies to a single KJS/KCS engine.)	Number of bytes greater than 0, default is 32768.
SQLDebugMsgs	Enables printing of all SQL statements executed on iPlanet Application Server consoles.	**0** - Turns off printing of SQL statements. **1** - Turns on printing of SQL statements.

DAE3

The DAE3 key contains parameters associated with third-party JDBC drivers. You can configure up to three third-party JDBC drivers for use with your application server. Unlike the driver names in DAE and DAE2, you can choose to give your driver a unique name. Each driver key contains the following values:

Table 12 Registry CCS0\DAE3 parameters

Parameter	Description	Acceptable Values
3PNativeDrvDir	Contains the location of the native database driver if it is of type 2.	A valid directory location. For example, for Oracle, it is `$ORACLE_HOME\lib`.
classname	The driver's classname.	Example: if the driver is an Oracle driver, the value would be: `oracle.jdbc.driver.OracleDriver`

classpath	A semi-colon separated list of the classpaths to the driver's libraries.	A valid classpath, for example:
		
		`D:\Oracle\Ora81\jdbc\lib\classes.zip;`
		`D:\Oracle\Ora81\jdbc\lib\nls_charset12.zip`

EB Parameters

The EB section of the registry contains parameters that control Enterprise Java Bean management in the application server. You can make changes to these values using the EJB tab in the iPlanet Application Server Administration Tool.

The parameters described in this section are available under the following area of the registry:

Windows NT

`HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\EB`

UNIX

`\SOFTWARE\iPlanet\Application Server\6.0\CCS0\EB`

Table 13 Registry CCS0\EB parameters

Parameter	Description	Acceptable Values
DefaultFoSaveInterval	How frequently the EJB state is saved. If the server fails, the last saved state of the EJB can be restored. Data saved is available to all engines in a cluster. This value is set on a per server basis and applies to EJBs that were deployed with Failover option enabled (on the General tab of the Deployment Tool EJB descriptor editor).	Default is `10` seconds
DefaultPassivationTimeout	Time that elapses before the state of the EJB, which is currently in memory, is written to disk. This value must be less than the session timeout.	Default is `60` seconds
DefaultSessionTimeout	If an EJB is not accessed for the specified time, it is removed. Applies to stateful session EJBs.	Default is `14400` seconds

Table 13 Registry CCS0\EB parameters *(Continued)*

Parameter	Description	Acceptable Values
DefaultTransportTimeout	The timeout for the beans stored in Dsync when failover is enabled. After this timeout, the bean is removed from Dsync. Not used for non-failover (file) storage.	Default is `60` seconds
EbInterval	How frequently the EJB pool checks to see if it should passivate or remove an EJB.	Default is `10` seconds
EbObjFreePoolMax	The size of the pool of free beans corresponding to the `<free-pool-maxsize>` entry in the `ias-ejb-jar.xml` descriptor. All entity beans accessed are put in the free pool for future use and are not recycled.	Default is `20`
EbObjPoolMax	The maximum number of bean objects that may be in the busy pool at a time.	Default is 1000000
ImplFreePoolMax	Maximum cache size in number of EJBs.	Default is `10` EJBs
ImplPoolMax	The maximum number of bean implementation objects in the busy pool at a time. Set to the same value as EbObjPoolMax.	Default is 1000000
MaxMetaMgrCacheSize	Refers to the metadata cache for EJBs. Value is in number of EJBs.	Default is `30`

EJB-Components Parameters

The EJB-Components parameters section of the registry list the EJB applications deployed to the application server and their associated GUIDs. It is not recommended that you change the values of the GUIDs. Use the `iasdeploy removeapp` command to uninstall the ELB component and then redeploy the component, creating a new GUID. The Boot\BootStrapBean parameter also should not be changed through the use of the registry.

The EJB-Components key is located under the following area of the registry:

WINDOWS

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\EJB-Components
```

UNIX

```
Software\iPlanet\Application Server\6.0\EJB-Components
```

Engine Parameters

The Engine parameters define the runtime model of the various iPlanet Application Server engines. Use these parameters to set up Executive (KXS), Java (KJS), and C++ (KCS) server processes.

All the parameters described in this section are available under the following area of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\ENG
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\CCS0\ENG
```

Table 14 Registry CCS0\Eng parameters

Parameter	Description	Acceptable Values
ID	The ID of the main executive engine.	Default is zero. Do not change this value.

Table 14 Registry CCS0\Eng parameters *(Continued)*

Parameter	Description	Acceptable Values
Key	The product key. When you install iPlanet Application Server, supply this key. Reset this parameter if you supplied the wrong information during installation, or if you want to convert an evaluation server into a fully capable production server.	The product key provided in the Welcome letter you receive with the product.
Main	Identifies the main Executive Server (KXS) engine whose location is referred to in *Engine number*\Host (see below).	The Executive Server number for this installation. The default value is 0.
MaxEngines	The maximum number of engines that the Executive Server (KXS) will serve.	A value greater than the number of engines you are configuring. The default value is 32.
Engine number\Disable	Disables the specified KXS, KJS, or KCS engine. Disable an engine when you want to isolate test scenarios. To troubleshoot general server failures (for example, when requests cannot be completed) disable all but one KJS and KCS engine.	**0** - Enables the specified engine. **1** - Disables the specified engine.
Engine number\ EngineStopTimeout	Amount of time an engine is allowed to time-out before stopping.	Default is 60
Engine number\Host	The host name of the machine running the specified engine.	The IP address of the host on which the KXS engine runs. On NT this entry may be 127.0.0.1 if the engine runs on a local server.
Engine number\ID	The specified engine's type.	**0** - Executive Server (KXS) **1000** - Java Server (KJS) **3000** - C++ Server (KCS)

Engine number\Name	The name of the specified engine.	`"Main Engine"`
		`"C++ Engine"`
		`"Java Engine"`

Table 14 Registry CCS0\Eng parameters *(Continued)*

Parameter	Description	Acceptable Values
Engine number\Port	The TCP/IP port number of the specified engine. All port numbers must be unique.	A valid unique port number. (NT) Default values are: **KXS** - 11000 **KJS** - 11001 **KCS** - 11002
Engine number\EB	Use this registry section to override Enterprise Java Bean parameters set in the CCS0\EB registry sections for a particular engine. If this section is empty, the engine uses the default values set in the CCS0\EB registry section.	Copy keys that are found in the CCS0\EB section of the registry and reset their values.
Engine number\REQ	Use this registry section to override Request Manager parameters set in the CCS0\REQ registry sections for a particular engine. If this section is empty, the engine uses the default values set in the CCS0\REQ registry section.	Copy keys that are found in the CCS0\REQ section of the registry and reset their values.
Engine number\TXNMGR	Use this registry section to override Transaction Manager parameters set in the CCS0\TXNMGR registry sections for a particular engine. If this section is empty, the engine uses the default values set in the CCS0\TXNMGR registry section.	Copy keys that are found in the CCS0\TXNMGR section of the registry and reset their values.

EVENTS Parameters

The EVENTS section of the registry contains application events registered with an older version of the iPlanet Application Server. All application events registered by the Application Server after release 6 appear in the EVENTS2 section of the registry.

Windows NT
`HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\EVENTS`

UNIX
`\SOFTWARE\iPlanet\Application Server\6.0\CCS0\EVENTS`

EVENTS2 Parameters

The EVENTS2 section of the registry contains application events stored via AppLogics. Using the iPlanet Application Server APIs, developers can create an event and schedule a time or create a trigger to spring the event. These events are stored in the registry along with a value representing the event's on or off status. Administrators should not modify EVENTS2 parameters. Do not change the values in the SessionInvalidator subkey.

All the parameters described in this section are available under the following area of the registry:

Windows NT
`HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\EVENTS2`

UNIX
`\SOFTWARE\iPlanet\Application Server\6.0\CCS0\EVENTS2`

Table 15 Registry CCS0\EVENTS2 parameters

Parameter	Description	Acceptable Values
Scheduler\ActionCount	Specifies the total number of actions in a particular application event.	A number greater than zero. A value of 1 denotes an application event with one action, a value of 4 denotes an application event containing four actions.
Scheduler\Enable	Enables or disables an application event.	0 is off 1 is on Default value is 1.

Table 15 Registry CCS0\EVENTS2 parameters *(Continued)*

Parameter	Description	Acceptable Values
Scheduler\Time	Specifies the time intervals at which subsequent actions in the application event are processed.	Time events are specified on one line as demonstrated below: Every ten seconds: *:0,10,20,30,40,50:0 */*/* Every two seconds: *:0,2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32,34,36,38,40,42,44,46,48,50,52,54,56,58:0 */*/*
Scheduler\ *Action_number*\ Sequence	A number specifying where in the application event order the action is to take place.	If this is the first action in the application event sequence, the value is 1. If this is the fourth action in the application event sequence, the value is 4.

Scheduler\ *Action_number*\ *Action_type*	Defines the type of action in the sequence.	This could be a servlet request, such as the following method in a Process Manager application:
		`ServletReq=pae/Engine.npm?ias_request_appname=pae&ias_request_servletname=Engine.npm&eventId=OnPerformScheduledEvent&REQUEST_METHOD=GET`
		You could also have multiple action keys in this section, such as in a mail action:
		`MailFile=/u/rchinta/appev.mail`
		`SenderAddr=rchinta`
		`MailHost=nsmail-2`
		`ToList=rchinta`

The following example shows two registered application events. The first application event contains four actions: one servlet, one mail, and two application logic requests. The second application event has only one action, an application logic request. Each application event is listed by its name under EVENTS2. The values under the event correspond to its attributes, and each subkey under the event corresponds to an Action of that event.

```
EVENTS2
  - tstEv1
      Enable=1
      Time=*:0,10,20,30,40,50:0 */*/*
      ActionCount=4
    - 1
        Sequence=1
        NewReq=GUIDGX-{754CE8F7-8B7A-153F-C38B-0800207B8777}
    - 2
        Sequence=2
        ServletReq=HelloWorldServlet?arg1=val1&argu2=valu2
    - 3
        Sequence=3
        MailFile=/u/rchinta/appev.mail
        SenderAddr=rchinta
        MailHost=nsmail-2
        ToList=rchinta
    - 4
        Sequence=4
        NewReq=GUIDGX-{754CE8F7-8B7A-153F-C38B-0800207B8777}
  - tstEv2
      Enable=1
      Time=*:8:0 */*/*
      ActionCount=1
    - 1
      Sequence=1
      NewReq=GUIDGX-{754CE8F7-8B7A-153F-C38B-0800207B8777}?p1=hello0
```

Extensions Parameters

The Extensions key contains information used by the application server to locate installed extensions and determine load priority.

Table 16 Registry CCS0\Extensions parameters

Parameter	Description	Acceptable Values
NUM_LOAD_PROIORITIES	The load priority range for installed extensions. In this range, a value of zero has a higher load priority than a value of 5.	Default value is 5. Do not change.

Table 16 Registry CCS0\Extensions parameters *(Continued)*

Parameter	Description	Acceptable Values
Extension_name\ENABLED	Enables or Disables the extension.	1 is on (default). 0 is off.
Extension_name\GUID	The GUID for the extension.	Do not modify this value.
Extension_name\ LOADPRIORITY	Determines the load priority of the extension.	A value in the range of 0-5: 0 has highest priority, 5 has lowest.
Extension_name\ CONTEXT_NAMES\ *EXTENSION_NAME*	Names used internally by the application server to access extensions.	Do not modify this value.
Extension_name\ENGINES	The engines to which the extension is registered.	1000=java engine 3000=C+ engine

HTTPAPI Parameters

The HTTPAPI parameter contains information used by the Web Connector plug-in to communicate with iPlanet Application Server. The iPlanet Application Server installation program and the Web Connector plug-in usually set these variables to the proper values. However, if you need to change any of them, please review the following table before making any changes.

NOTE The Web Connector DebugMode key determines the amount of information that is dumped to the error log of the Web Connector plugin. You can set the environment variable `IAS_PLUGIN_LOG_FILE` to determine where the information goes.

Usually, the administrator restarts iPlanet Application Server after changing the registry. In this case, it is important to note that the administrator must restart the Web Server but does not need to restart the Application Server.

There is no administration tool interface for this parameter. Use `kregedit` to modify this parameter.

All the variables listed here are available under the following parameter:

Windows NT

`HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\HTTPAPI`

UNIX

`\SOFTWARE\iPlanet\Application Server\6.0\CCS0\HTTPAPI`

Table 17 Registry CCS0\HTTPAPI parameters

Parameter	Description	Acceptable Values
AgentToken	When the Web Connector plug-in receives a request, if the request URL contains the substring defined by this parameter, then the request is run in CGI mode instead of in plug-in mode. Use this parameter to define components that must be run as CGI requests.	Any ASCII value of length 80 used as a key in the URL. The default value is KXXK.
DebugMode	For the Web Connector, there is just one parameter to set to send more information to the logs. This information is useful for administrators to view iPlanet Application Server interactions with the Web Connector. Use this to isolate whether problems are from iPlanet Application Server or the Web Connector.	0-5: Displays debug messages according to the level. The highest level, 5, displays all the messages. The default is 0.
EnableStats	Enables or disables statistics.	**1** enables statistics **0** disables statistics (default)
ExtraBufferSize	Defines the size of the buffer. Sometimes used to configure extra buffer space for HTTP Header variables.	Number of bytes, usually `0`, because the buffer size calculation is done internally and the required buffer size is allocated properly.
GXIP	The IP address that the plug-in uses to find the iPlanet Application Server. Use this value first to troubleshoot any problems with a Web Connector plug-in configuration.	A valid IP address, default is `127.0.0.1`

Table 17 Registry CCS0\HTTPAPI parameters *(Continued)*

Parameter	Description	Acceptable Values
GXPortNum	The TCP/IP port number used by the plug-in to find the KXS process and send requests to it.	A valid port number, default is `10818`
HTTPPort	No longer supported.	
ListenPort	The Web Connector plug-in listener port. Do not modify this port number unless it conflicts with a separate process.	Currently not being used, so do not modify default value.
MaxConn	The maximum number of connection objects to open to the KXS engine.	Default is `1`
NASRespTime	If set to `1`, logs the response time in milliseconds that the Application Server requires to execute a request. This statistic is displayed in the error log file of the web server. Does not require DebugMode to be turned on. The NASRespTime time includes these steps: • Load balancing, if necessary • Sending the request and waiting for the response See also PluginRespTime.	`0` or `1`, default is `0`
NoCookie	Enables or disables cookies for the iPlanet Application Server. Turning this value on (1) completely disables cookies and forces the iPlanet Application Server to run in hidden-cookie mode (GXHC_). This parameter should be set to 0 (cookies are not disabled) for production (as opposed to test) systems.	**0** - (default) Cookies and hidden fields are passed back to the requesting web browser. **1** - Only hidden fields are passed back to the requesting web browser. **2** - Only cookies are passed back to the requesting browser
NoRespPage	The URL where the response is redirected when the server is down.	A URL

Table 17 Registry CCS0\HTTPAPI parameters *(Continued)*

Parameter	Description	Acceptable Values
PATH	The location of the docs directory for the web server.	A valid path
PluginRespTime	If set to `1`, logs the response time in milliseconds that the plugin requires to execute a request. This statistic is displayed in the error log file of the web server. Does not require DebugMode to be turned on. The PluginRespTime time includes these steps: • Extracting information from the URL (application name, servlet name, context path and so on) • Preparing the message to be sent to the Application Server • Load balancing, if necessary • Sending the request and waiting for the response • Rewriting the URLs in the response, if necessary • Streaming the response to the client See also NASRespTime.	`0` or `1`, default is `0`
PostDataToken	The name of the header with which raw post data is sent. This is read only when SendRawPostData=TRUE.	Default is `HTTP_POST_BODY`
RegReadInterval	Interval for re-reading the registry if dynamic reloading is turned on. (Dynamic reloading allows you to deploy or redeploy applications without restarting the iPlanet Application Server or the web server.) Normally the registry is read only during initialization time.	Number of seconds, default is `120`
RejectWhenBusy	Determines when a request is not accepted.	Do not change this value.
RootPatternTrans	Lists mappings of context roots to application names.	

Table 17 Registry CCS0\HTTPAPI parameters *(Continued)*

Parameter	Description	Acceptable Values
SSPL_APP_PREFIX	The Placeholder used by the NameTranslation part of the web server plugin to determine which URL requests are handled by the plugin and which by the Application Server.	Accepted values: any non-empty string Default: NASApp
SecUrlTrans	Lists URLs that are secured and the type of authentication needed for them.	URLs
SendRawPostData	Used to determine if the plugin should send POST data as is without embedding a hidden field or hidden cookie for browsers that don't support cookies.	FALSE (default) or TRUE
ServletPatternTrans	Lists servlet mappings to servlet names. After installation, this key has the mappings for the example and system applications.	
INPUTAPACHE	Contains the common HTTP variables of the Apache programming interface. Used by the Apache web server plug-in. * (See Table 18 on page 42 for details.)	Do not change the default values in these parameters.
INPUTISAPI	Contains the common HTTP variables of the Microsoft Internet Information Server Application Programming Interface (ISAPI). Used by the IIS web server plug-in. * (See Table 18 on page 42 for details.)	Do not change the default values in these parameters.
INPUTNSAPI	Contains the common HTTP variables of the iPlanet Web Server Application Programming Interface (NSAPI). Used by the iPlanet Web Server. * (See Table 18 on page 42 for details.)	Do not change the default values in these parameters.

* In a normal installation, the INPUTAPACHE, INPUTISAPI, and INPUTNSAPI parameters should initially be empty because all the common HTTP variables are automatically collected and sent to a component by the Web Connector plug-in. The following list contains HTTP variables that are automatically sent to components. If the iPlanet Application Server installation program adds a variable under this parameter that is already listed here, delete it from the registry. If you want to use a variable that is not in the list, add it under the INPUTAPACHE, INPUTISAPI, or INPUTNSAPI parameter.

All the entries under these three keys are validated against a list within the plugin. Any new key requires a code change. The list inside the plugin is identical to the one in Table 18.

The value of each parameter under INPUTAPACHE, INPUTISAPI, and INPUTNSAPI is either 0 or 1. Any key with a value of 0 is not sent to the iPlanet Application Server.

Table 18 INPUTAPACHE, INPUTISAPI, and INPUTNSAPI parameters

AUTH_TYPE	AUTH_USER
CLIENT_CERT	CONTENT_LENGTH
CONTENT_TYPE	HOST
HTTP_ACCEPT	HTTP_ACCEPT_CHARSET
HTTP_ACCEPT_ENCODING	HTTP_ACCEPT_LANGUAGE
HTTP_AUTHORIZATION	HTTP_CONNECTION
HTTP_COOKIE	HTTP_HOST
HTTP_IF_MODIFIED_SINCE	HTTP_REFERER
HTTP_USER_AGENT	HTTP_USER_DEFINED
HTTPS	HTTPS_KEYSIZE
HTTPS_SECRETKEYSIZE	PATH_INFO
PATH_TRANSLATED	QUERY
QUERY_STRING	REMOTE_ADDR
REMOTE_HOST	REMOTE_IDENT
REMOTE_USER	REQUEST_METHOD
SCRIPT_NAME	SERVER_NAME
SERVER_PORT	SERVER_PROTOCOL
SERVER_SOFTWARE	URL

HTTPLOG Parameters

This section of the registry contains the IP address of the machine housing the iPlanet Application Server, the listening port of the KJS, and the input variables that trigger an HTTPLOG log entry. The Web Server plugin sends the logging information using this data.

Each input variable (under INPUTVARS) is mapped to a database field. To enable logging of a particular component of a web server request, you must map HTTP variables to specific database fields to ensure that web server requests are properly logged. Mapping HTTP variables to database fields is done in the Web Connector Plug-in on the web server machine. The web server machine may or may not be the same machine where you installed iPlanet Application Server.

The parameters described in this section are available under the following area of the registry:

Windows NT

`HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\HTTPLOG`

UNIX

`\SOFTWARE\iPlanet\Application Server\6.0\CCS0\HTTPLOG`

Table 19 Registry CCS0\HTTPLOG parameters

Parameter	Description	Acceptable Values
Host	The IP address of the iPlanet Application Server.	A valid IP address, default is `127.0.0.1`.
Port	The port of the KJS engine.	A valid port number, default is `10818`.

Important: Do not change the default values of these variables.

Table 20 Registry CSS0\HTTPLOG\INPUTVARS parameters

AUTH_TYPE	AUTH_USER
CLIENT_CERT	CONTENT_LENGTH
CONTENT_TYPE	HOST
HTTP_ACCEPT	HTTP_ACCEPT_CHARSET
HTTP_ACCEPT_ENCODING	HTTP_ACCEPT_LANGUAGE
HTTP_AUTHORIZATION	HTTP_CONNECTION
HTTP_HOST	HTTP_IF_MODIFIED_SINCE
HTTP_PRAGMA	HTTP_REFERER
HTTP_USER_AGENT	HTTP_USER_DEFINED
HTTPS	HTTPS_CIPHER
HTTPS_KEYSIZE	HTTPS_SECRETKEYSIZE
PATH_INFO	PATH_TRANSLATED
QUERY	QUERY_STRING
REMOTE_ADDR	REMOTE_HOST
REMOTE_IDENT	REMOTE_USER
REQUEST_METHOD	SCRIPT_NAME
SERVER_NAME	SERVER_PORT
SERVER_PROTOCOL	SERVER_SOFTWARE
SERVER_URL	URL

Load Balancing Parameters

Load balancing parameters let you control how requests are handled across all your iPlanet Application Servers. With load balancing enabled, you can direct certain requests to be run on an available server instead of waiting for a busy server to become available. iPlanet Application Servers regularly update their load statistics and broadcast them to other servers in the cluster. Based on load balancing factors, requests are dynamically routed to servers.

The Load Balance screen of the Administration tool provides an interface to this section of the registry. You can use the Administration tool to configure server load balancing or response time. If you use server load balancing, you can then set the attributes iPlanet Application Server evaluates for server load balancing.

Administrators might want to manually edit the registry to turn on load-balance logging. This is especially useful when doing capacity planning in the preproduction stage.

The parameters described in this section are available under the following area of the registry:

Windows NT

`HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\LOADB`

UNIX

`\SOFTWARE\iPlanet\Application Server\6.0\CCS0\LOADB`

Table 21 Registry CCS0\LOADB parameters

Parameter	Description	Acceptable Values
Disable	Disables load balancing if set to `1`.	`0` or `1`, default is `0`.
ConnectRetry	The number of times a thread skips a downed connection before attempting to re-establish it.	Default is `1000`, installation value is `30`.
AgentBroadCastInterval	The length of time, in seconds, between each broadcast of information about distributed components that is sent out across the servers in a cluster.	A value representing the number of elapsed seconds between broadcasts.
AgentLoadFactors\ AgentCached	The relative importance (to other AgentLoadFactors) of the result of the cached component as a factor in computing component execution performance. This figure is specified as a percent. The sum total of all AgentLoadFactors (AgentCached, AvgExecTime, Hits, LastExecTime, and ServerLoad) must equal 100 percent, or zero if ResponseTime is 100.	A number greater than or equal to 0, less than or equal to 100. Default is `40`, installation value is `0`. (0 <= x <= 100)

Table 21 Registry CCS0\LOADB parameters *(Continued)*

Parameter	Description	Acceptable Values
AgentLoadFactors\ AvgExecTime	The relative importance of the average component execution time in measuring execution performance. This figure is specified as a percent. The sum total of all AgentLoadFactors (AgentCached, AvgExecTime, Hits, LastExecTime, and ServerLoad) must equal 100 percent, or zero if ResponseTime is 100.	A number greater than or equal to 0, less than or equal to 100. Default is `10`, installation value is `0`. (0 <= x <= 100)
AgentLoadFactors\ LastExecTime	The relative importance of a component's last execution time in computing component execution performance. This figure is specified as a percent. The sum total of all AgentLoadFactors (AgentCached, AvgExecTime, Hits, LastExecTime, and ServerLoad) must equal 100 percent, or zero if ResponseTime is 100.	A number greater than or equal to 0, less than or equal to 100. Default is `5`, installation value is `0`. (0 <= x <= 100)
AgentLoadFactors\ ResponseTime	If this is set to 100, load balancing uses response time statistics only. ResponseTime and the other AgentLoadFactors (AgentCached, AvgExecTime, Hits, LastExecTime, and ServerLoad) are mutually exclusive. When ResponseTime is 100 and all others are zero, which is the case after installation, the load balancing scheme is based on per agent response time. Enabling RoundRobin takes precedence over this load balancing scheme.	`0` or `100`. Default is `0`. Installation value is `100`. (0 <= x <= 100)

Table 21 Registry CCS0\LOADB parameters *(Continued)*

Parameter	Description	Acceptable Values
AgentLoadFactors\ ServerLoad	The relative importance of the server load (computed using ServerLoadFactors; see below) in computing component execution performance. This figure is specified as a percent. The sum total of all AgentLoadFactors (AgentCached, AvgExecTime, Hits, LastExecTime, and ServerLoad) must equal 100 percent, or zero if ResponseTime is 100.	A number greater than or equal to 0, less than or equal to 100. Default is `40`, installation value is `0`. (0 <= x <= 100)
AgentLoadFactors\ ServLoadUpdateInteval	The length of time between each update of server load information. a server load update applies the server load data that has been sampled up until the moment when the update occurs.	A time in seconds.
AgentLoadFactors\Hits	The relative importance of the number of times a component is run on the iPlanet Application Server in computing component execution performance. This figure is specified as a percent. The sum total of all AgentLoadFactors (AgentCached, AvgExecTime, Hits, LastExecTime, and ServerLoad) must equal 100 percent, or zero if ResponseTime is 100.	A number greater than or equal to 0, less than or equal to 100. Default is `5`, installation value is `0`. (0 <= x <= 100)
AgentMaxHop	The maximum number of hops a component makes from server to server while it is being load balanced.	A number greater than or equal to 0. (A value of 0 causes no load balancing to occur.)
AgentsNoMonitorInterval	The length of time, in seconds, between each sampling of the currently executing components for the iPlanet Application Server.	A value representing the number of elapsed seconds between component monitoring sessions.
CPUPerfMonitorInterval	The length of time, in seconds, between each sampling of CPU usage for the iPlanet Application Server.	A value representing the number of elapsed seconds between CPU usage monitoring for this machine.

Table 21 Registry CCS0\LOADB parameters *(Continued)*

Parameter	Description	Acceptable Values
DSKOpMonitorInterval	The length of time, in seconds, between each sampling of disk usage of the machine running this installation of iPlanet Application Server.	A value representing the number of elapsed seconds between disk usage monitoring sessions.
LoadBDaemonInterval	The length of time, in seconds, that elapses between each attempt to perform load balancing-related monitoring activities. The server checks for activity related to other intervals - ServerLoadUpdateInterval, ServBroadcastInterval, AgentBroadcastInterval - every LoadBDaemonInterval seconds. Note that all load-balancing monitoring intervals are rounded up to the multiple of this time interval.	A number greater than 0. For example, a value of 5 represents a 5 second interval between each attempt at performing load balancing-related monitoring activities.
Log	Determines the kind of information that the Load Balancer outputs to the error log.	**1** - Logs all component requests redirected by the server to other servers (*log_redirect)*. **2** - Logs all server load statistics being gathered and received by the server (*log_server_info*). **4** - Logs all component statistics gathered and received by the server *(log_applogic_info*). Values are bit positions that can be OR'd together, depending on desired level of debugging detail. For example, a value of 3 (1 | | 2) provides a combination of request redirection and host information.
McastAppStats	Used by the KXS-based server side load balancer to multi-cast load balancing data.	Obsolete. Use of this key is not recommended.
MemThrashMonitorInterval	The length of time, in seconds, between each sampling of memory usage for the iPlanet Application Server.	A value representing the number of elapsed seconds between memory usage monitoring sessions.

Table 21 Registry CCS0\LOADB parameters *(Continued)*

Parameter	Description	Acceptable Values
RoundRobin	Enables true Round Robin load balancing. This can only be set through `kregedit`. If set, this takes precedence over all other load balancing schemes.	**1** - Round robin enabled. **0** - Round robin disabled (default).
ServBroadcastInterval	The length of time, in seconds, between each broadcast of load information across all the servers in a cluster.	A value representing the number of elapsed seconds between each broadcast of load information.
ServerLoadFactors\ CPU-Usage	The relative importance of CPU usage in computing server load (AgentLoadFactors\ServerLoad). This figure is specified as a percent. The sum total of all ServerLoadFactors (CPU-Usage, Disk-Usage, Mem-Usage, and Exec-Reqs) must equal 100 percent, or zero if Response-Time is 100. Enabling RoundRobin takes precedence over this load balancing scheme.	A number greater than or equal to 0, less than or equal to 100. Default is `35`. Installation value is `0`. (0 <= x <= 100)
ServerLoadFactors\ Disk-Usage	The relative importance of disk usage in computing server load (AgentLoadFactors\ServerLoad). This figure is specified as a percent. The sum total of all ServerLoadFactors (CPU-Usage, Disk-Usage, Mem-Usage, and Exec-Reqs) must equal 100 percent, or zero if Response-Time is 100. Enabling RoundRobin takes precedence over this load balancing scheme.	A number greater than or equal to 0, less than or equal to 100. Default is `25`. Installation value is `0`. (0 <= x <= 100)

Table 21 Registry CCS0\LOADB parameters *(Continued)*

Parameter	Description	Acceptable Values
ServerLoadFactors\ Exec-Reqs	The relative importance of the total number of components currently running on the iPlanet Application Server in computing server load (AgentLoadFactors\ServerLoad). This figure is specified as a percent. The sum total of all ServerLoadFactors (CPU-Usage, Disk-Usage, Mem-Usage, and Exec-Reqs) must equal 100 percent, or zero if Response-Time is 100. Enabling RoundRobin takes precedence over this load balancing scheme.	A number greater than or equal to 0, less than or equal to 100. Default is `5`. Installation value is `0`. (0 <= x <= 100)
ServerLoadFactors\ Mem-Usage	The relative importance of memory usage in computing server load (AgentLoadFactors\ServerLoad). This figure is specified as a percent. The sum total of all ServerLoadFactors (CPU-Usage, Disk-Usage, Mem-Usage, and Exec-Reqs) must equal 100 percent, or zero if Response-Time is 100. Enabling RoundRobin takes precedence over this load balancing scheme.	A number greater than or equal to 0, less than or equal to 100. Default is `35`. Installation value is `0`. (0 <= x <= 100)
ServerLoadFactors\ Response-Time	If this is set to 100, load balancing uses response time statistics only. Response-Time and the other ServerLoadFactors (CPU-Usage, Disk-Usage, Mem-Usage, and Exec-Reqs) are mutually exclusive. When Response-Time is 100 and all others are zero, which is the case after installation, the load balancing scheme is based on per server response time. Enabling RoundRobin takes precedence over this load balancing scheme.	`0` or `100`. Default is `0`. Installation value is `100`. (0 <= x <= 100)

Table 21 Registry CCS0\LOADB parameters *(Continued)*

Parameter	Description	Acceptable Values
ServLoadUpdateInterval	The length of time, in seconds, between each update of server load information. A server load update applies the server load data that has been sampled up until the moment when the update occurs.	A value representing the number of elapsed seconds between updates of load information.

Logging Parameters

The Logging parameters in the registry allow you to control the ability to log iPlanet Application Server messages and HTTP Web server messages. The log service is normally configured through the Logging tool of the iPlanet Application Server Administrator, though you can also use the registry to specify the destination and type of messages generated by the log.

Logging lets you record messages generated by application-level and system-level services when these services are invoked. A service is invoked when a component object requires that service to process a user request. For example, when a data access request is generated, the component object invokes the data access service, causing the log service to output messages about the processing of the request.

You can set the log service to log three types of messages:

- **Information messages** describe the processing of a request or normal service activity, such as a status update.
- **Warning messages** describe a non-critical problem that might be an indication of a greater problem.
- **Error messages** describe a critical failure of the service from which recovery is not likely.

For more information about logging, see the *Administration Guide.*

All the parameters described in this section are available under the following area of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\LOGGING
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\CCS0\LOGGING
```

Table 22 Registry CSS0\LOGGING parameters

Parameter	Description	Acceptable Values
DateFormat	Specifies whether a 2 or 4 digit year date format is used.	**0** - 2 digit format. **1** - 4 digit format (default).
EnableEvtLog	Enables logging of server events. (Events are logged to the console, and on UNIX are redirected from the console to a file.)	**0** - Disables logging. **1** - Enables logging.
EnableHTTPLog	When set to `1`, enables logging of HTTP requests and calls the Call Back Interface `gxclientlogcallback`.	**1** - Enables logging of HTTP requests. **0** - Disables logging of HTTP requests (default).
EnableRotation	Enables log file rotation.	**0** - Disables log rotation. **1** - Enables log rotation.
EvtBatchInterval	The interval between two flushes of the event log cache to the database that is specified in EvtDatabase.	A number representing seconds.
EvtBatchSize	The size of the event log cache in number of records.	A number greater than 0.
EvtDatabase	The name of the database to connect to. Must be of the type specified in EvtDataSource.	The actual database name, as opposed to the logical name (stored in EvtDataSource).
EvtDataSource	The user-defined logical name of the database to log event information to.	The logical database name. Must match an entry under DAE DataSources (see “Database Parameters,” on page 23).
EvtPswd	The password for the user ID specified in EvtUser	The password for the user ID
EvtTable	The name of the table in which log messages are stored.	The table name
EvtUser	The user ID under which the connection to the database, specified in EvtDatabase, is made.	A valid user ID
HttpBatchInterval	The interval between two flushes of the HTTP log cache to the database specified in HttpDatabase.	A number, greater than 0, representing seconds.

Table 22 Registry CSS0\LOGGING parameters *(Continued)*

Parameter	Description	Acceptable Values
HttpBatchSize	The size of the HTTP log cache in number of records.	A number greater than 0.
HttpDatabase	The name of the specific database to connect to. Must be of the type specified in HttpDataSource.	The actual database name, as opposed to the logical name (stored in HttpDataSource).
HttpDataSource	The logical name of the database to log HTTP request information to. This references the same database as the one specified in HttpDatabase.	The logical database name. Must match an entry under DAE DataSources (see "Database Parameters," on page 23).
HttpPswd	The password for the user ID specified in HttpUser.	A valid password.
HttpTable	The name of the table in which HTTP log messages are stored.	A valid table name.
HttpUser	The user ID under which the connection to the database specified in HttpDatabase is made.	A valid user ID.
LogEventDB	Enables the logging of events to the database specified in EvtDataBase.	**1** - Logs events to the database. **2** - Does not log events to the database.
Mode	The level of logging.	**1** - Prints information only. **2** - Prints information and warnings. **3** - Prints all messages.
ProcessConsole	Prints messages to the server processes console window.	**1** - Prints log messages to the console. **0** - Does not print log messages to the console.
RotateTime	Stores the time and date for log rotation.	A time in the format 0: 0: 0 and the date / month / day.
Text	Enables logging information to be stored in a text file.	**0** - Disables logging to a text file. **1** - Enables logging to a text file.

Table 22 Registry CSS0\LOGGING parameters *(Continued)*

Parameter	Description	Acceptable Values
TextPath	The name of the file where logging information is stored.	A valid file name. The server adds attributes to TextPath to distinguish the log file names for different server processes.

MSGDB Parameters

This section of the registry is used for localization.

The parameters described in this section are available under the following area of the registry:

Windows NT

`HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\MSGDB`

UNIX

`\SOFTWARE\iPlanet\Application Server\6.0\CCS0\MSGDB`

Table 23 Registry CCS0\MSGDB parameters

Parameter	Description	Acceptable Values
Locale	Contains the language locale of messages.	A valid language locale. en_US
MSGDBPath	A message file is used by the server to read in messages. The location of the message file is stored in this parameter.	Any valid directory where permissions are available for the iPlanet Application Server user. Default value is: *install_dir*\APPS

POOLS Parameters

The POOLS key in the CSS0 section of the iPlanet Application Server registry contains information that pertains to database pooling.

The parameters described in this section are available under the following area of the registry:

Windows NT

`HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\POOLS`

UNIX

`\SOFTWARE\iPlanet\Application Server\6.0\CCS0\POOLS`

Table 24 Registry CSS0\POOLS parameters

Parameter	Description	Acceptable Values
DebugLevel	The database debugging level. The value in this parameter determines the amount of debugging information written to the server log.	Possible values: 0 - no debugging info 1 - error messages, warnings and debug info (default) 2 - debug level 1 + status messages on how full the connection cache is.
MaxPoolSize	Defines the maximum number of connections allowed in the connection pool.	Default is `20` Possible values: 0 to available connections from database
MaxWait	The amount of wait time for a connection to be retrieved from the pool when all connections in the pool are full.	Default is `32` Possible values: 0 to max int in seconds.
MonitorInterval	Monitor interval can be increased or decreased depending on how much monitoring window time is needed.	Default is `60` Possible values: 0 to max int in seconds.
SteadyPoolSize	Connection Cache maintains this many free connections at any one time.	Default is `10` Possible values: 0 to CacheMaxConn.

Table 24 Registry CSS0\POOLS parameters *(Continued)*

Parameter	Description	Acceptable Values
UnusedMaxLife	Amount of time in seconds when unused connections will be disconnected.	Default is `300`

RESOURCEMGR Parameters

This section of the registry contains one folder for each configured resource manager. The parameters in the folder correspond to the Resource Manager screen of the Administration Tool. These values can be set from the Administration Tool. Administrators should not need to manually edit the values in this key.

The parameters described in this section are available under the following area of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\RESOURCEMGR
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\CCS0\RESOURCEMGR
```

Table 25 Registry CCS0\RESOURCEMGR parameters

Parameter	Description	Acceptable Values
ResourceMgr_name\ DatabaseType	This contains the value for the database type.	A supported database such as Oracle.
ResourceMgr_name\ IsEnabled	Enables or disables the resource manager.	0 is disabled. 1 is enabled.
ResourceMgr_name\ OpenString	Contains the value of the open string for this resource manager. This should have the parameters for accessing a particular database (username, password, permissions).	A valid open string.

ResourceMgr_name\ ThreadMode	Contains the value for the thread mode for this resource manager.	`single_association`
		`serialize_all_operations`
		`multiple_associations`
		`serialize_start_end`

Component Request Manager and Path Parameters

Path parameters control where iPlanet Application Server locates components, queries, servers, and templates. Request manager parameters control the thread pool for that iPlanet Application Server uses to process requests.

The parameters described in this section are available under the following areas of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\QUERY
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\REQ
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\SYSTEM_JAVA
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\TEMPLATE
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\CCS0\QUERY
\SOFTWARE\iPlanet\Application Server\6.0\CCS0\REQ
\SOFTWARE\iPlanet\Application Server\6.0\CCS0\SYSTEM_JAVA
\SOFTWARE\iPlanet\Application Server\6.0\CCS0\TEMPLATE
```

Table 26 Registry Component Request Manager and Path parameters

Parameter	Description	Acceptable Values
QUERY\PATH	A semi-colon delimited list of root paths that the runtime server uses to find and load SQL query files (.GXQ). All .GXQ files must reside on the file system based on a root path. If the iPlanet Application Server has trouble with loading query files, check this value first and make sure that the path points to the correct location of the .GXQ files.	A list of valid root paths to locate the .GXQ files. Default is: *install_dir*\ias\APPS

Table 26 Registry Component Request Manager and Path parameters *(Continued)*

Parameter	Description	Acceptable Values
REQ\ThreadInit	The number of threads that the request manager initially creates to process concurrent requests. You can reconfigure this parameter based on your iPlanet Application Server configuration and TPM requirements.	To run the iPlanet Application Server server in multi-process, single-thread mode (MP/ST), set this and the next two Thread parameters (ThreadMax, ThreadMin) to 1. **Note:** ThreadInit, ThreadMax, and ThreadMin can also be set on a per engine basis under the ENG*Engine number* parameter described under "Engine Parameters," on page 31.
REQ\ThreadMax	The maximum number of threads in the thread pool. You can reconfigure this parameter based on your iPlanet Application Server configuration and TPM requirements.	To run the iPlanet Application Server server in multi-process, single-thread mode (MP/ST), set this parameter (plus ThreadInit and ThreadMin) to 1. **Note:** ThreadInit, ThreadMax, and ThreadMin can also be set on a per engine basis under the ENG*Engine number* parameter described under "Engine Parameters," on page 31.

Table 26 Registry Component Request Manager and Path parameters *(Continued)*

Parameter	Description	Acceptable Values
REQ\ThreadMin	The minimum number of threads in the thread pool. You can reconfigure this parameter based on your iPlanet Application Server configuration and TPM requirements.	To run the iPlanet Application Server server in multi-process, single-thread mode (MP/ST), set this parameter (plus ThreadInit and ThreadMax) to 1. **Note:** ThreadInit, ThreadMax, and ThreadMin can also be set on a per engine basis under the ENG*Engine number* parameter described under "Engine Parameters," on page 31.
REQ\LowaterMark	The minimum number of requests that should be available in the queue.	Default is `8`
REQ\HighwaterMark	The maximum number of requests that should be available in the queue.	Default is `128`
REQ\LoRequestQueue	Not used.	
REQ\HiRequestQueue	Not used.	
REQ\StepMax	The maximum number of steps that iPlanet Application Server can perform when executing a request. The maximum required is never more than 8 steps.	Default is `200`
REQ\ FlowControlEnabled	When set to `1`, enables the request flow control determined by LowaterMark and HighwaterMark.	`0` or `1`, default is `1`
REQ\Debug	Enables writing of information to the log file for debugging when set to `1`.	`0` or `1`, default is `0`

Table 26 Registry Component Request Manager and Path parameters *(Continued)*

Parameter	Description	Acceptable Values
SYSTEM_JAVA\ GX_CLASSPATH	A semi-colon delimited list of root paths that the runtime Java Server (KJS) uses to find and load components. Changing this value is unnecessary unless you are using Applogics, which are deprecated.	A list of valid root paths of Java components. For example: `C\:NAS211\APPS\ GXAPP\BASE\JAVA`
SYSTEM_JAVA\ GX_CLASSPATH_CORE	A semi-colon delimited list of prefixes that the runtime KJS server uses to identify server and component classes that are loaded by the JDK class loader instead of by the KJS class loader. If a component uses native methods, the prefix of its package name should be added to this parameter. Changing this value is unnecessary unless you are using Applogics, which are deprecated.	A list of prefixes of Java classes loaded by the JDK class loader. For example: `"java.;com.kivasoft"`
TEMPLATE\PATH	A semi-colon delimited list of paths that the runtime server uses to find and load template files. If iPlanet Application Server has trouble evaluating templates, check this value first. **Note**: Templates are evaluated using evalTemplate, a class that you overwrite to specify how a template should be filled.	A list of valid root paths to locate template files. For example: C:\HTML

State Parameters

The State section of the registry contains the host and IP address of the executive server.

The parameters described in this section are available under the following area of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\State
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\CCS0\State
```

Table 27 Registry CCS0\State parameters

Parameter	Description	Acceptable Values
Host	The host address of the executive server engine.	A valid IP address.
Port	The port of the executive server engine.	A valid port number. The default installation port is 10819.

Security Parameters

Security is handled by several parameters throughout the iPlanet Application Server registry. The following areas are affected by the security parameters:

- ACL database
- Principal database
- component ACL
- Encryption
- Default access

ACL Database

Access Control Lists (ACLs) can be created through iPlanet Application Server Administrator or the kreg tool.

The parameters described in this section are available under the following area of the registry:

Windows NT
`HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\ACL\DB0`

UNIX
`\SOFTWARE\iPlanet\Application Server\6.0\ACL\DB0`

Table 28 ACL security parameters

Parameter	Description	Acceptable Values
ACL name	An anonymous ACL that you can use to perform access checks to an application resource.	The name of the anonymous ACL.
iAS Administration \ DataString	Encrypted Access Control list for administration.	Do not modify this value.
iAS Deployment \ DataString	Encrypted Access Control list for deployment.	Do not modify this value.

Principal Database

User and group security are defined in the Principal Database section of the registry. The keys for this section are available under the following area of the registry:

Windows NT
`HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\PRINCIPAL\DBO`

UNIX
`\SOFTWARE\iPlanet\Application Server\6.0\PRINCIPAL\DBO`

Table 29 Registry Principal database security parameters

Parameter	Description	Acceptable Values
User name	The name of a user known to the iPlanet Application Server.	A valid user name.
User name \ Type	The type of the user name entry.	**1** - User type (as opposed to Group type)

Table 29 Registry Principal database security parameters *(Continued)*

User name \ AuthData:0	Authorization data for the user (password).	The valid password for the user name.
Group name	The user group known to the iPlanet Application Server.	A valid group name.
Group name \ Type	The type of the group entry.	**2** - Group type (as opposed to User type)
Group name \ *user1* ... \ *user2* ... \ *user3*	The name of a user within the user group known to the iPlanet Application Server. Multiple users can be listed under the group name.	A valid user name for the specified group.

Component ACL

The ClassImp parameters include an Access Control List (ACL) for the components on your iPlanet Application Server. For more information, see “ClassImp Parameters,” on page 14.

Encryption

The encryption parameters of the registry control encryption between your web server and iPlanet Application Server.

The parameters described in this section are available under the following area of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\SECURITY
```

UNIX

```
\SOFTWARE\iPlanet\ClassImp\Application Server\6.0\CCS0\SECURITY
```

Table 30 Registry CCS0\SECURITY parameters

Parameter	Description	Acceptable Values
EnableEncryption	When set to D, the messages between plugin and KXS are encrypted selectively for those components for which encryption is set to true. When set to 0, none of the messages are encrypted.	**D** - Turns on encryption. **0**- Turns off encryption.
LogEncryption	When set to 1, encryption and decryption messages appear in the logs. Not created by default. You must create this key if you want to use it.	0 or 1

Note that you can also apply encryption on a per-component basis. To do so, modify the .GXR registration file of each component that needs to be security-enabled by appending the `:encrypt=y` parameter in the file. Then run the `kreg` command against each .GXR file that you modify.

The following example shows what the edited .GXR file looks like:

```
component chain1::sample:encrypt=y

{0f6d8120-6e1f-11cf-96fd-0020afed9a65}

GXApp/Sample/chain1.class
```

If you want to view log messages of the security module, browse to the following key:

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\SECURITY
```

Windows NT and UNIX

Select Edit > Add Value and in the name field enter LogEncryption. In the value field enter 1 to view log messages. A value of 0 turns off the ability to view log messages. In the type field, select Integer. Select OK.

Default Access

The default access parameters control how iPlanet Application Server handles a user that is not explicitly denied or given permission to run components by the component ACL. Default access parameters can be specified on a a per-component group basis.

For more information about component ACL security, see “ClassImp Parameters,” on page 14.

The parameters described in this section are available under the following area of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\Security\Request
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\CCS0\Security\Request
```

Table 31 Registry CCS0\Security\Request parameters

Parameter	Description	Acceptable Values
Request\DefaultAccess	The default access for component groups listed under Request\Groups. A group’s self-defined DefaultAccess parameter (see Request\Groups*Group Name*\DefaultAccess below), if one exists, takes precedence over this global default.	**0** - Don’t care **1** - Disallow **4** - Allow
Request\Groups*Group Name*	The component group. For each group, the default access parameters are defined.	A valid component group name.
Request\Groups*Group Name*\DefaultAccess	Within a specific component group, the group’s self-defined DefaultAccess parameter. Takes precedence over the value in Request\DefaultAccess.	**0** - Don’t care **1** - Disallow **4** - Allow

TXNMGR Parameters

The TXNMGR section of the registry contains parameters for the Transaction Manager log.

The parameters described in this section are available under the following area of the registry:

Windows NT

`HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\CCS0\TXNMGR`

UNIX

`\SOFTWARE\iPlanet\Application Server\6.0\CCS0\TXNMGR`

Table 32 Registry CCS0\TXNMGR parameters

Parameter	Description	Acceptable Values
DirectoryRoot	Contains the file name for the transaction manager's log file. The transaction manager is dependent on a log file to maintain data integrity.	Any valid directory where permissions are available for the iPlanet Application Server user. Default value is: *install_dir*\CCS0\TXNMGR
GlobalTxnEnabled	Global transactions are either enabled or disabled at the process level.	0 is off (default). 1 is on.
IsEnabled	Transaction manager can be disabled, if a process is not using transaction managers i.e. EJBs.	0 is off. 1 is on (default). Disabling not recommended.
MirrorRootDirectory	Because the transaction manager is dependent on a log file, a mirror log is always in use. This parameter contains the path name for the mirror log file.	Any valid directory where permissions are available for the iPlanet Application Server user. Default value is: *install_dir*\CCS0\TXNMGR_MIRROR
ENG*id#*\ AdminMode	The process needs to be run in admin mode t run transaction administration commands.	0 is off (default). 1 is on.
ENG*id#*\ IsRawPartition	The LogVolume can be either a raw partition or a file.	0 is off (default). 1 is on.
ENG*id#*\ LogVolumeDiskName	The file name of the Log Volume Disk.	A path in the TXMGR directory used above, with ENG*id#*\logVol at the end of the path. Default value is: *install_dir*\CCS0\TXNMGR\ENG*id#*\logVol

Table 32 Registry CCS0\TXNMGR parameters *(Continued)*

Parameter	Description	Acceptable Values
ENG*id#*\ LogVolumeOffset	Amount of raw partition used.	Default value is -1 Acceptable values: 0 to LogVolumeSize
ENG*id#*\ LogVolumeSize	The size of the log volume in bytes.	Default is 1000. Acceptable values: 0 to the actual or available space in either file or raw partition.

DataSource Parameters

The DataSource key directly below the Current Control Set (CCS0) key contains a listing of all data sources registered with the application server.

To delete a data source, you need to remove the relevant entry from iPlanet Registry. The data source is located in the following area of the registry:

WINDOWS

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\DataSource
```

UNIX

```
Software\iPlanet\Application Server\6.0\DataSource
```

To delete a registered data source:

1. Select the data source key you want to delete.
2. Choose the `Edit > Delete` command.

   Confirm your selection.
3. Stop and restart the iPlanet Application Server.

NOTE You can remove a datasource that you have added, by removing the relevant entry from iPlanet Registry. You cannot remove a datasource using iPlanet Application Server Administration Tool, as this feature is not yet implemented.

Table 33 Top-level registry DataSource parameters

Parameter	Description	Acceptable Values
DataBase	The type of database used by the application server.	A database name.
DataBaseUrl	The URL where the database client exists.	Example for an Oracle database: `jdbc:oracle:thin@`*host*`:`*port*`:`*database*
DataSource	Corresponds to the database server identification information maintained on the client.	Example: the entry in `tnsnames.ora` for Oracle or the interfaces file for Sybase.
DriverType	A valid database driver type.	A third-party driver type can have any user-defined name. Native DAE and DAE2 drivers must follow iPlanet Application Server database driver naming conventions (see "Database Parameters," on page 23 for more information).
PassWord	The encrypted password of the database administrator.	You should register the password using the `dbsetup` command.
UserName	The user name of the database administrator.	You should register the UserName using the `dbsetup` command.

Deployment Parameters

The Deployment Parameters section of the registry contains values used by the Deployment Management tool.

The values for deployment are available under the following area of the registry. Do not modify the values in this section of the Registry.

WINDOWS

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\Deployment
```

UNIX

```
Software\iPlanet\Application Server\6.0\Deployment
```

Table 34 Registry Deployment parameters

Parameter	Description	Acceptable Values
JarPath	The directory path to JAR files used by the Deployment Tool	A valid directory path.
Install\Datasource properties	The command that registers datasources with the application server.	Do not modify this value.
Install\EJB properties	The command that registers EJBs with the application server.	Do not modify this value.
Install\NTV	The command that registers servlets with the application server.	Do not modify this value.
Install\Regedit	The command that opens the application server registry editor.	Do not modify this value.
Install\Registry	The command that closes the flat registry file for the application server.	Do not modify this value.
LogicalName\ NAS_APPBIN	The directory path to Application Server installed application binary files.	Do not modify this value.
LogicalName\ NAS_APPROOT	The root directory for Application Server installed applications.	Do not modify this value.
LogicalName\ WWW_DOCROOT	The root directory path for Application Server online documentation.	Do not modify this value.

GMS Parameters

The GMS section of the Registry contains the Global Message Service (GMS) multicasting parameters used for load balancing.

The parameters described in this section are available under the following area of the registry:

WINDOWS

`HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\GMS`

UNIX

`Software\iPlanet\Application Server\6.0\GMS`

Table 35 Registry GMS parameters

Parameter	Description	Acceptable Values
MCastHops	The multicast hops count used by the load balancer.	Default is `1`
MCastHost	The multicast IP addresses used by the load balancer.	Default is `228.8.18.71`
MCastPort	The multicast port used by the load balancer.	Default is `9608`
UDPEchoPort	The UDP Ping port of the GMS. If this key is missing in the registry, it is created.	A valid port number, default is `9610`
UDPPort	The UDP port of the GMS.	Default is `0`
Servers\ *IP_address*	The IP addresses of all machines in the same network as this iPlanet Application Server which also have an iPlanet Application Server installations.	A list of valid IP addresses

J2EE-Application

The parameters in this section of the Registry contain ACL role names and application paths for all J2EE applications registered with the Application Server.

This J2EE-Application section is located under the following area of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\J2EE-Application
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\J2EE-Application
```

J2EE-Module

The J2EE-Module section contains meta information about modules registered with the Application Server. Do not modify System and Boot keys.

This J2EE-Module section is located under the following area of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\J2EE-Module
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\J2EE-Module
```

Java Parameters

This section of the registry lists paths to java classes and libraries. You can also specify the path to a JVM and supply java arguments to the java engine at runtime using this key.

The parameters described in this section can be located in the following area of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\Java
```

UNIX

(Not present)

Table 36 Registry Java parameters

Parameter	Description	Acceptable Values
ClassPath	A semi-colon separated list of Java class paths the application server Java engine needs.	A valid Java classpath.
JVM	The JVM used by the Java engine.	A valid path to an installed JVM.
JavaArgs	Arguments sent to the Java engine at startup.	A valid Java argument.
LibPath	A semi-colon separated list of Java Library paths used by the Java engine.	A valid Java library path.

National Language Support Parameters

The NLS section of the registry is used to enable and disable National Language Support.

The parameters described in this section can be found in the following location of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\NLS
```

UNIX

```
SOFTWARE\iPlanet\Application Server\6.0\NLS
```

Table 37 Registry NLS parameters

Parameter	Description	Acceptable Values
INTERNATIONAL	Enables or disables National Language Support.	0 is disabled 1 is enabled

IASAT Parameters

The IASAT section of the registry Contains basic login and preference information for the iPlanet Application Server Administration tool.

The parameters described in this section are available under the following area of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\IASAT
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\IASAT
```

Table 38 Registry IASAT parameters

Parameter	Description	Value
MaxTimeout	Amount of time the server attempts to start an engine before an error message is thrown.	Default is 60 Acceptable values: 0 to max int seconds
MaxTimeoutLogin	Amount of time server attempts to login before an error message is thrown.	Default is 20 Acceptable Values: 0 to max int seconds
MaxTimeoutProcessControl	Amount of time the server attempts to create a process before an error message is thrown.	Default is 60 Acceptable values: 0 to max int seconds
Login*Server_IP*\name	Name of the application server.	Default is iAS1
Login*Server_IP*\password	Encrypted password for administration user.	Do not modify.
Login*Server_IP*\username	User name for administration user	A valid user name
Login*Server_IP*\Groups	A listing of ACL groups allowed to perform administrative actions on the Application Server.	A valid user group.

Table 38 Registry IASAT parameters *(Continued)*

Parameter	Description	Value
Plots\id	The number of graph plots used to monitor the Application Server.	Empty unless the Administrator has set plots for monitoring the server using the Admin Tool. If plots are set, this number represents the amount of plots line created.
Plots*Plot_number*	The number associated with a monitoring plot line on the server monitor graph.	
Plots*Plot_number*\attr	The attribute being monitored by the plot line on the server monitor graph.	A valid plot attribute. This value is usually set by the Admin Tool. There are roughly fifteen attributes for process tracking available through the Administration Tool. Possible Values: Average Execution Time Requests/Interval Total Requests
Plots*Plot_number*\color	The color used by the plot line on the server monitor graph.	A valid plot line color. This value is usually set by the Admin Tool. Acceptable Values: Red, Green, Blue, Magenta.
Plots*Plot_number*\name	The name of the server being monitored by the graph.	A valid server name. This value is usually set by the Admin Tool.
Plots*Plot_number*\process	The name of the process being monitored by the graph.	A valid process name. This value is usually set by the Admin Tool.

Table 38 Registry IASAT parameters *(Continued)*

Parameter	Description	Value
Plots*Plot_number*\\scale	The scale rendered by the server monitor graph.	A valid scale. This value is usually set by the Admin Tool. Acceptable values: 1:1 10:1 1:10 1:100 1:1,000 1:10,000 more in Admin Tool...
Plots*Plot_number*\\server	The name of the registered server being monitored.	A valid server instance. This value is usually set by the Admin Tool.

jndiConfig Parameters

This section of the registry contains JNDI handler names for Java classes that the iPlanet Application Server needs in order to carry out certain functions, such as EJB creation, mail services, JMS publishing, and so on.

This section is located under the following area of the registry:

Windows NT

```
HKEY_LOCAL_MACHINE\SOFTWARE\iPlanet\Application Server\6.0\jndiConfig
```

UNIX

```
\SOFTWARE\iPlanet\Application Server\6.0\jndiConfig
```

Debugging Parameters

The iPlanet Application Server registry contains several parameters that help you in debugging. These parameters are located throughout the registry, under different sections. When you experience problems with a certain module, go to the section of the registry where the appropriate debugging parameter is located and turn the switch on to collect information in the error logs. After you change a registry parameter, be sure to restart the iPlanet Application Server.

All parameters that affect the error logs should be turned on only when diagnosing existing problems. Remember to turn the parameters off after you finish debugging. Otherwise, the log file will continue to rapidly increase in size and take up disk space on your machine.

The following table organizes the iPlanet Application Server debugging parameters according to the module being debugged.

Table 39 Debugging parameters

Module	Parameter	Description	Acceptable Values
Data Access Engine (DAE)	SOFTWARE\ iPlanet\ Application Server \6.0\ CCS0\DAE2\ CacheDebugMsgs	Enables DAE to output information to the error log about each of the supported drivers (ODBC, DB2_CLI, INFORMIX_CLI, ODBC_CLI, and SYBASE_CTLIB). The number in parenthesis at the end of a debug message is the connection number to which the message applies.	**0** - Turns off debugging. **1** - Turns on debugging.
Data Access Engine (DAE)	SOFTWARE\ iPlanet\ Application Server \6.0\ CCS0\DAE2\ SQLDebugMsgs	Enables printing of all SQL statements executed on iPlanet Application Server consoles.	**0** - Turns off printing to the console. **1** - Turns on printing to the console.

Table 39 Debugging parameters *(Continued)*

Module	Parameter	Description	Acceptable Values
Web Connector Plug-in (HTTPAPI)	SOFTWARE\ iPlanet\ Application Server \6.0\ CCS0\ HTTPAPI\ DebugMode	Determines the amount of information that is dumped to the error log of the Web Connector Plug-in. Applies only to iPlanet Web Server.	**0** (default) - Provides the minimum amount of error information. **1**, **2** - Provide increasing amounts of information beyond what 0 provides. **3** - Provides the maximum amount of error information. **Note:** If you change the value of this parameter, restart the iPlanet Web Server, rather than iPlanet Application Server, for the new value to take effect.
Connection Manager (CONN)	SOFTWARE\ iPlanet\ Application Server \6.0\ CCS0\CONN\ DebugLevel	Outputs more information on CONN-related events such as Connections, sends, receives, connection breakage, etc.	A value of 1 through 4, with 1 being least verbose and 4 being most. **1** - Logs information about a new connections and connection close. **2** and **3** - Log information about activity that checks if other machines in the cluster are active. **4** - Logs information about every packet sent and received.

Table 39 Debugging parameters *(Continued)*

Module	Parameter	Description	Acceptable Values
Load Balancer (LOADB)	SOFTWARE\ iPlanet\ Application Server \6.0\ CCS0\ LOADB\Log	Determines the kind of information that the Load Balancer outputs to the error log.	**1** - Logs all component requests redirected by the server to other servers (*log_redirect)*. **2** - Logs all server load statistics being gathered and received by the server (*log_server_info*). **4** - Logs all component statistics gathered and received by the server *(log_applogic_info*) Values are bit positions that can be OR'd together, depending on the level of debugging detail you want. For example, a value of 3 (1 | | 2) provides a combination of request redirection and host information.

Command Line Tools

The following iPlanet Application Server command line tools can be located in the `iAS6\ias\bin\` directory.

beanreg

The `beanreg` command allows you to register a java bean with the application server.

Usage: `beanreg [-l local/kreg only] [-b BMDI only] [-n naming only] [-d debug] [-r remove bean] [-p print mangled methods]` *properties_file* | *serialized_descriptor*

build

The `build` command uses the ANT builder to build applications. For more information on the ANT builder and using this command, see:

`http://developer.iplanet.com/appserver/samples/docs/build.html`

charsetconv

`charsetconv` is a deprecated command.

convert2jsp11

For information on how and when to use this command see the *iPlanet Application Server Migration Guide*.

Usage: `convert2jsp11 [-r] -ap appPath file/directory`

Table 40 convert2jsp11 options

Option	Description
`-ap`	Specifies the appPath.
`-r`	Optional. Specifies if the directory must be recursively spanned to convert JSP files.

The file / directory must *always* be specified relative to the appPath

convertNtv2Xml

For information on how and when to use this command see the *iPlanet Application Server Migration Guide*.

Usage: `convertNtv2Xml $path/appInfo.ntv $target-path/myApp.xml`

where:

Table 41 convertNtv2Xml options

Option	Description
`$path`	Path to the appInfo.ntv.
`$target-path`	Location where you want the XML file.
`$myApp.xml`	Name of the XML file you want to create.

convertProps2Xml

For information on how and when to use this command see the *iPlanet Application Server Migration Guide*.

dbsetup

The `dbsetup` command launches the Database Connectivity Setup utility.

deploycmd

The `deploycmd` command is deprecated. Use the `iasdeploy` command instead.

deploytool

The `deploytool` command launches the iPlanet Application Server Deployment Tool. To learn how to use the deployment tool, select `Tutorial` after launching the tool.

dsreg

The `dsreg` command is deprecated. Use the `iasdeploy` command instead.

ejbc

The `ejbc` command allows you to compile an Enterprise Java Bean. The command line syntax is as follows:

typical: `ejbc [options]` *home remote impl*

RMIC mode: `ejbc [options] -rmic` *remote*

Where options are:

Table 42 ejbc options

Option	Description
`-sl`	Compile as stateless session bean.
`-sf`	Compile as stateful session bean.
`-fo`	Compile stateful session bean to be Highly Available.
`-cmp`	Compile as Container Managed Persistence (CMP) entity bean.
`-iiop`	Generate additional CORBA classes.
`-gs`	Generate java source files.
`-d` *dir*	Declare output directory.
`-help`	Show help message.
`-rmic`	Generate RMIC code (see usage).
`-classpath` *classpath*	Set classpath. (Option `-cp` is depreciated, use classpath instead.)
`-javaccp` *classpath*	Prefix to javac classpath

ejbreg

The `ejbreg` command is deprecated. Use the `iasdeploy` command instead.

iascontrol

The iascontrol command allows you to start and stop application server engine instances from the command line.

Usage: `iascontrol` *subcommand* `[-instance` *instance* `|[-user` *user* `-password` *password*`] [-host` *host* `-port` *port*`] ]`

Where the subcommands include:

Table 43 iascontrol subcommands

Subcommand	Description
`start`	Starts an application server instance on the local host, Starts the admin server if not already started.
`stop`	Stops the engines of an application server. The admin server is not stopped.
`kill`	force the immediate, non-graceful termination of all application server processes (local host only)

Where the options include:

Table 44 iascontrol options

Option	Description
`-instance`	Name of server instance as registered in admin tool.
`-user`	Name of user that has administrative authorization for the specified server.
`-password`	The password associated with user.
`-host`	The hostname or IP address of the target server instance.
`-port`	The port number of the application server's administrative server. Port 10817 is the default.
`-help`	Displays usage information.

Before using the start and stop commands you must register the server instance via the application server admin tool.

iasdeploy

After you create an EAR file or a module (WAR or EJB JAR file), you can use the command line interface to deploy, remove, or register the J2EE module or application.

Command Line Usage: `iasdeploy` *subcommand* `[options]` *operand*

Where the subcommands include:

Table 45 iasdeploy subcommands

Subcommand	Description
`deployapp`	Deploys a J2EE application.
`deploymodule`	Deploys a J2EE EAR or EJB JAR module which are inside a J2EE EAR application, Web application, or EJB JAR.
`removeapp`	Removes a J2EE application and its associated modules.
`removemodule`	Removes the module(s) which are inside J2EE EAR or Web application EJB JAR modules.
`regdatasource`	Registers a JDBC datasource.

Where the options include:

Table 46 iasdeploy options

Option	Description
`-verbose`	Displays additional information while the command executes.
`-instance`	Identifies an instance as registered through the iPlanet Administration Tool. Identifying the host name and port number, username and password, is equivalent to identifying the target server instance.
`-host`	The host name or IP address of the target application server instance.
`-port`	The port number of the Application Server's administrative server. Port 10817 is the default.
`-user`	The name of the user that has deployment authorization for the specified application server.
`-password`	The password associated with the user.

Table 46 iasdeploy options *(Continued)*

Option	Description
`-help`	Displays help on a particular subcommand.

Upon successful completion of a subcommand, a “completed successfully” message appears.

If any of the options are incorrectly specified, an error message is displayed.

Targeting an Application Server Instance

An instance name is the lookup key that represents the host name, port number, user name and password. The instance option accepts an instance name as registered in the iPlanet Administration Tool. So, when you want to deploy an application using the command line interface, simply identify the instance name that you registered in AdminTool.

There are three ways to specify the target application server instance:

- Use the local target instance.

  If you do not specify an instance name, the local server instance is used. The local server instance is the one you registered using the iPlanet Administration Tool.

  For example: `iasdeploy deploymodule fortune.war`

  In this example, since the instance argument is not specified; and the host name, port number, username, and password are also not identified, the local instance is used.

- Specify the instance name.

  For example: `iasdeploy deployapp -instance prodserver fortune.ear`

  In this example, the `fortune.ear` application will be deployed to the `prodserver` instance.

  Prior to using an instance name, it must be registered through the iPlanet Administration Tool.

- Specify the connection parameters for a single application server instance.

  Use the following options to specify the connection parameters for the application server instance:

  `-host` is the hostname or IP address of the target application server instance.

`-port` is the port number of the application server's administrative server (KAS).

`-user` is the name of the user that has deployment authorization for the specified application server.

`-password` is the password associated with `-user`.

For example: `iasdeploy deployapp -host bighost -port 1088 -user hanan -password hanansecret fortune.ear`

This is equivalent to using the -instance option with an instance name that represents the host, port, user, and password options.

deployapp

This subcommand deploys the J2EE application EAR file to the server as an application.

Usage: `iasdeploy deployapp [-verbose] [-instance` *instance*`... | [-host` *host* `-port` *port*`] [-user` *user* `-password` *password*`] ]` *EAR_file*

Where: `<instance>` is the instance name as registered in the iPlanet Administration Tool. *EAR_file* is the file name of J2EE application EAR file you wish to deploy (for example `myApp.ear`).

deploymodule

This subcommand deploys the specified J2EE WAR or EJB JAR module file, or EAR file.

Usage: `iasdeploy deploymodule [-verbose] [-instance` *instance*`... | [-host` *host* `-port` *port*`] [-user` *user* `-password` *password*`] ] [`*module_file* `|` *EAR_file*`]`

Where: *module_file* is the file name of the J2EE WAR or EJB JAR module you wish to deploy. *EAR_file* is the file name of the J2EE application EAR file from which modules are to be extracted and deployed.

If the operand is a module (WAR or EJB JAR file), then it is deployed as is. If the operand is an EAR file, all the modules inside it are extracted and deployed as modules. A deployed J2EE WAR or EJB JAR module, or EAR file can only be removed using the removemodule subcommand.

removeapp

This subcommand removes the deployed J2EE application EAR file from the application server instance. The removal process deletes all associated entries from the Application Server registry and the related files from the deployment area of the application server instance.

Usage: `iasdeploy removeapp [-verbose] [-instance` *instance*`... | [-host` *host* `-port` *port*`] [-user` *user* `-password` *password*`] ] [`*EAR_file*`]`

Where: *EAR_file* is the file name of the J2EE application EAR file to remove.

For example: `iasdeploy removeapp fortune.ear`

The application server configuration state reverts back to the same state prior to the original deployment of the application. The application can only be removed, using removeapp, if you deployed it using the deployapp subcommand.

removemodule

This subcommand removes the J2EE module from the application server instance. The removal process deletes all associated entries from the Application Server registry and the related files from the deployment area of the application server instance.

Usage: `iasdeploy removemodule [-verbose] [-instance` *instance*`... | [-host` *host* `-port` *port*`] [-user` *user* `-password` *password*`] ] [`*module_file* `|` *EAR_file*`]`

Where: *module_file* is the file name of the J2EE WAR or EJB JAR module to remove. *EAR_file* is the file name of the J2EE application EAR file, including modules, to remove.

For example: `iasdeploy removemodule fortune.war`

If the operand is a module (WAR or EJB JAR file), then it is deployed as is. If the operand is an EAR file, all the modules inside it are removed. A module can only be removed only after it was deployed as a module using the deploymodule subcommand.

regdatasource

This subcommand registers JDBC data source definitions with the application server. It takes an XML file built according to the IASDatasource_1_0.dtd as input and registers the JDBC data source within the Application Server registry of the specified application server instances.

Usage: `iasdeploy regdatasource [-verbose] [-instance` *instance*`... | [-host` *host* `-port` *port*`] [-user` *user* `-password` *password*`] ]` *datasource_XML_file*

Where: *datasource_XML_file* is the file name of the datasource XML.

For example: `iasdeploy regdatasource mydatasource.xml`

help

This option gets help on a particular Subcommand.

Usage: `iasdeploy` *subcommand* `-help or iasdeploy -help` *subcommand*

For example: `iasdeploy -help deployapp or iasdeploy deployapp -help`

provides a complete help description for the iasdeploy command, the subcommands, and options command lists and usage.

idlj

Command line usage: `idlj [options]` *idl_file*

Where *idl_file* is the name of a file containing IDL definitions, and `[options]` is any combination of the options listed below. The *idl_file* is required and must appear last.

Options include:

Table 47 idlj options

Option	Description
`-d` *symbol*	This is equivalent to the following line in an IDL file: `#define` *symbol*
`-emitAll`	Emit all types, including those found in `#include` files.
`-f` *side*	Define bindings to emit. *side* is one of `client`, `server`, `all`, `serverTIE`, `allTIE`. `serverTIE` and `allTIE` cause delegate model skeletons to be emitted. If this flag is not used, `-fclient` is assumed.
`-i` *include_path*	By default, the current directory is scanned for included files. This option adds another directory.
`-keep`	If a file to be generated already exists, do not overwrite it. By default it is overwritten.
`-noWarn`	Suppress warnings.

Table 47 idlj options *(Continued)*

Option	Description
`-pkgPrefix` *t prefix*	When the type or module name *t* is encountered at file scope, begin the Java package name for all files generated for *t* with *prefix*.
`-td` *dir*	Use *dir* for the output directory instead of the current directory.
`-v`, `-verbose`	Verbose mode.
`-version`	Display the version number and quit.

j2eeappreg

The `j2eeappreg` command is deprecated. Use the `iasdeploy` command instead to deploy an application to the application server. This command allows you to deploy applications to the local machine only. Use `iasdeploy` to deploy applications locally or remotely.

JDBCSWITCH_NAS21

For more information on how and when to use this command see the *iPlanet Application Server Migration Guide.*

jdbcsetup

The `jdbcsetup` command is an NT command. jdbcsetup is a utility that allows you to configure up to three third party drivers for use with the application server. Use `db_setup` or the iPlanet Application Server Administration Tool on SOLARIS to configure third-party JDBC drivers.

kas

The `kas` command allows you to run the application server form the command line instead of as a service or starting it with a UI element. The syntax is as follows:

`kas [options]` *params*

Table 48 kas options

Option	Description
`-install`	Install the service.
`-remove`	Remove the service.
`-debug` *params*	Run as a console app for debugging.
`-cmd` *params*	Run as a non-service app.

kcs

The `kcs` command allows you to start the C+ engine from the command line in verbose mode.

kjs

Use the `kjs` command to start the java engine from the command line in interactive mode.

Command line usage: `kjs [options]`

Where options are:

Table 49 kjs options

Option	Description
`-help -usage /? -? -h`	Show command help.
`-init` *file*	Initialization file.
`-port` *port*	Initial accept port.
`-cset` *cset*	Current control set.
`-eng` *engine*	Current engine name.
`-iiop`	Current engine runs as IIOP to KCP bridge.
`-debug`	Verbose debug messages.
`-jdb`	Start JVM in debuggable mode.

kreg

Use the `kreg` command to register a Java application or module with the application server. Use the command as follows: `kreg` *path_to_file*`.gxr`

This starts the AppLogic / Module Registration Utility. Once the AppLogic / Module Registration Utility is called, you are asked for a series of parameters to register your application / module:

Table 50 kreg parameters

Parameter	Description
`AppLogic/Module name`	Enter the name of the application / module to be registered.
`GUID`	Enter the GUID associated with the application / module.
`path to JAVA PCODE`	Enter the path to the java code.
`path to COM DLM`	Enter the path to the deployment descriptor file.

kregedit

Use the `kregedit` command to launch the iPlanet Registry Editor.

ksvradmin

Use the `ksvradmin` command to launch the iPlanet Application Server Administration Tool

kxs

Use the `kxs` command to start the application server executive engine in interactive verbose mode.

ldap

Use the `ldap` command to write all registry settings which map to the directory server to the directory server. These settings are covered in the first part of this chapter. This is the echo to the screen when `ldap` is called:

```
C:\iPlanet\iPM6\ias\bin>kreg -save kreg.out
"SOFTWARE\iPlanet\Application Server\ClassDef"
"SOFTWARE\iPlanet\Application Server\NameTrans"
"SOFTWARE\iPlanet\Application Server\Clusters"
"SOFTWARE\iPlanet\Application Server\6.0\EJB-Components"
"SOFTWARE\iPlanet\Application Server\6.0\ACL"
"SOFTWARE\iPlanet\Application Server\6.0\PRINCIPAL"
"SOFTWARE\iPlanet\Application Server\6.0\GMS"

"SOFTWARE\iPlanet\Application Server\6.0\CCS0\DAE\DATASOURCES"
"SOFTWARE\iPlanet\Application Server\6.0\CCS0\DAE2\DATASOURCES"
"SOFTWARE\iPlanet\Application Server\6.0\CCS0\EB"
"SOFTWARE\iPlanet\Application Server\6.0\CCS0\EXTENSIONS"
"SOFTWARE\iPlanet\Application Server\6.0\CCS0\LOADB"
"SOFTWARE\iPlanet\Application Server\6.0\CCS0\REQ"
"SOFTWARE\iPlanet\Application Server\6.0\CCS0\SECURITY"
"SOFTWARE\iPlanet\Application Server\6.0\NLS"

Connected to LDAP server on requiem port 389

saving: SOFTWARE\iPlanet\Application Server\ClassDef
saving: SOFTWARE\iPlanet\Application Server\NameTrans
saving: SOFTWARE\iPlanet\Application Server\Clusters
saving: SOFTWARE\iPlanet\Application Server\6.0\EJB-Components
saving: SOFTWARE\iPlanet\Application Server\6.0\ACL
saving: SOFTWARE\iPlanet\Application Server\6.0\PRINCIPAL
saving: SOFTWARE\iPlanet\Application Server\6.0\GMS
saving: SOFTWARE\iPlanet\Application Server\6.0\CCS0\DAE\DATASOURCES
saving:
SOFTWARE\iPlanet\ApplicationServer\6.0\CCS0\DAE2\DATASOURCES
saving: SOFTWARE\iPlanet\Application Server\6.0\CCS0\EB
saving: SOFTWARE\iPlanet\Application Server\6.0\CCS0\EXTENSIONS
saving: SOFTWARE\iPlanet\Application Server\6.0\CCS0\LOADB
saving: SOFTWARE\iPlanet\Application Server\6.0\CCS0\REQ
saving: SOFTWARE\iPlanet\Application Server\6.0\CCS0\SECURITY
saving: SOFTWARE\iPlanet\Application Server\6.0\NLS
```

ldapdelete

Use the `ldapdelete` command to delete the ldap attributes you specify.

usage: `ldapdelete [options] [dn...]`

Where options are:

Table 51 ldapdelete options

Option	Description
`-n`	Show what would be done but don't actually do it.
`-v`	Run in verbose mode (diagnostics to standard output).
`-h host`	LDAP server name or IP address.
`-p port`	LDAP server TCP port number.
`-V n`	LDAP protocol version number (2 or 3; default is 3).
`-Z`	Make an SSL-encrypted connection.
`-P pathname`	Path to SSL certificate database.
`-N`	Name of certificate to use for SSL client authentication.
`-K pathname`	Path to key database to use for SSL client authentication.
`-m pathname`	Path to security module database.
`-W`	SSL key password.
`-Q [token][:certificate name]`	PKCS 11
`-X pathname`	FORTEZZA compromised key list (CKL).
`-I pin`	Card password file.
`-D binddn`	bind dn.
`-w passwd`	Bind passwd (for simple authentication).
`-E`	Ask server to expose (report) bind identity.
`-R`	Do not automatically follow referrals.
`-O hop lim`	Maximum number of referral hops to traverse.
`-M`	Manage references (treat them as regular entries).
`-0`	Ignore LDAP library version mismatches.
`-i charset`	Character set for command line input (default is locale).

Table 51 ldapdelete options *(Continued)*

Option	Description
`-k dir`	Conversion routine directory (default is .).
`-y proxydn`	DN used for proxy authorization.
`-H`	Display usage information.
`-c`	Continuous mode (do not stop on errors).
`-f file`	Read DNs to delete from file.

ldapmodify

Use the `ldapmodify` command to modify the ldap you specify. You can modify the following settings:

Usage: `ldapmodify [options]`

Where options are:

Table 52 ldapmodify options

Option	Description
`-n`	Show what would be done but don't actually do it.
`-v`	Run in verbose mode (diagnostics to standard output).
`-h host`	LDAP server name or IP address.
`-p port`	LDAP server TCP port number.
`-V n`	LDAP protocol version number (2 or 3; default is 3).
`-Z`	Make an SSL-encrypted connection.
`-P pathname`	Path to SSL certificate database.
`-N`	Name of certificate to use for SSL client authentication.
`-K pathname`	Path to key database to use for SSL client authentication.
`-m pathname`	Path to security module database.
`-W`	SSL key password.
`-Q [token][:certificate name]`	PKCS 11
`-X pathname`	FORTEZZA compromised key list (CKL).

Table 52 ldapmodify options *(Continued)*

Option	Description
`-I pin`	Card password file.
`-D binddn`	Bind dn.
`-w passwd`	Bind passwd (for simple authentication).
`-E`	Ask server to expose (report) bind identity.
`-R`	Do not automatically follow referrals.
`-O hop lim`	Maximum number of referral hops to traverse.
`-M`	Manage references (treat them as regular entries).
`-0`	Ignore LDAP library version mismatches.
`-i` *charset*	Character set for command line input (default is locale).
`-k` *dir*	Conversion routine directory (default is .).
`-y` *proxydn*	DN used for proxy authorization.
`-H`	Display usage information.
`-c`	Continuous mode (do not stop on errors).
`-A`	Display non-ASCII values in conjunction with `-v`.
`-f` *file*	Read modifications from file instead of standard input.
`-a`	Add entries.
`-b`	Read values that start with `/` from files (for bin attrs).
`-F`	Force application of all changes, regardless of replica lines.
`-e` *rejfile*	Save rejected entries in *rejfile*.
`-B` *suffix*	Bulk import to *suffix*.
`-q`	Be quiet when adding/modifying entries.

ldapsearch

Use the `ldapsearch` command to search the ldap for the string you specify in the command.

Usage: `ldapsearch -b basedn [options] filter [attributes...]`

```
ldapsearch -b basedn [options] -f file [attributes...]
```

where:

Table 53 ldapsearch arguments

Argument	Description
`basedn`	base dn for search (if the environment variable `LDAP_BASEDN` is set, then the `-b` flag is not required).
`filter`	RFC-2254 compliant LDAP search filter.
`file`	File containing a sequence of LDAP search filters to use.
`attributes`	White-space-separated list of attributes to retrieve (if no attribute list is given, all are retrieved).

Where options include:

Table 54 ldapsearch options

Option	Description
`-n`	Show what would be done but don't actually do it.
`-v`	Run in verbose mode (diagnostics to standard output).
`-h host`	LDAP server name or IP address.
`-p port`	LDAP server TCP port number.
`-V n`	LDAP protocol version number (2 or 3; default is 3).
`-Z`	Make an SSL-encrypted connection.
`-P pathname`	Path to SSL certificate database.
`-N`	Name of certificate to use for SSL client authentication.
`-K pathname`	Path to key database to use for SSL client authentication.
`-m pathname`	Path to security module database.
`-W`	SSL key password.
`-Q [token][:certificate name]`	PKCS 11
`-X pathname`	FORTEZZA compromised key list (CKL).

Table 54 ldapsearch options *(Continued)*

Option	Description
`-I pin`	Card password file.
`-D binddn`	Bind dn.
`-w passwd`	Bind passwd (for simple authentication).
`-E`	Ask server to expose (report) bind identity.
`-R`	Do not automatically follow referrals.
`-O hop lim`	Maximum number of referral hops to traverse.
`-M`	Manage references (treat them as regular entries).
`-0`	Ignore LDAP library version mismatches.
`-i charset`	Character set for command line input (default is locale).
`-k dir`	Conversion routine directory (default is .).
`-y proxydn`	DN used for proxy authorization.
`-H`	Display usage information.
`-t`	Write values to files in temp directory.
`-U`	Produce file URLs in conjunction with `-t`.
`-e`	Minimize base-64 encoding of values.
`-u`	Include User Friendly entry names in the output.
`-o`	Print entries using old format (default is LDIF).
`-T`	Don't fold (wrap) long lines (default is to fold).
`-1`	Omit leading `version: 1` line in LDIF output.
`-A`	Retrieve attribute names only (no values).
`-B`	Print non-ASCII values when old format (`-o`) is used.
`-x`	Perform sorting on server.
`-F sep`	Print '`sep`' instead of '`=`' between attribute names and values.
`-S attr`	Sort the results by attribute '`attr`'.
`-s scope`	One of `base`, `one`, or `sub` (search scope).

Table 54 ldapsearch options *(Continued)*

Option	Description
`-a deref`	One of `never`, `always`, `search`, or `find` (alias dereferencing).
`-l time lim`	Time limit (in seconds) for search.
`-z size lim`	Size limit (in entries) for search.
`-G before:after:index:count | before:after:value`	Where '`before`' and '`after`' are the number of entries surrounding '`index`'. '`count`' is the content count, '`value`' is the search value.

productversion

Use the `productversion` command to display the current installed version of iPlanet Application Server in the "product / release number / service pack" format.

resreg

The `resreg` command is deprecated. Use the `iasdeploy` command instead.

rmic

The `rmic` command executes a remote method invocation call.

Usage: `rmic [options]` *class_names*

Where `[options]` include:

Table 55 rmic options

Option	Description
`-keep` `-keepgenerated`	Do not delete intermediate generated source files.
`-v1.1`	Create stubs / skeletons for 1.1 stub protocol version.
`-vcompat`	Create stubs / skeletons compatible with both 1.1 and 1.2 stub protocol versions (default).
`-v1.2`	Create stubs for 1.2 stub protocol version only.

Table 55 rmic options *(Continued)*

Option	Description
`-iiop`	Create stubs for IIOP. When present, `[options]` also include: `-always` Create stubs even when they appear current. `-alwaysgenerate` Same as "`-always`". `-nolocalstubs` Do not create stubs optimized for same.
`-idl`	Create IDL. When present, `[options]` also include: `-always` Create IDL even when it appears current `-alwaysgenerate` Same as "`-always`". `-noValueMethods` Do not generate methods for valuetypes.
`-g`	Generate debugging info.
`-depend`	Recompile out-of-date files recursively.
`-nowarn`	Generate no warnings.
`-nowrite`	Do not write compiled classes to the file system.
`-verbose`	Output messages about what the compiler is doing.
`-classpath` *path*	Specify where to find input class files.
`-sourcepath` *path*	Specify where to find user source files.
`-bootclasspath` *path*	Override location of bootstrap class files.
`-extdirs` *path*	Override location of installed extensions.
`-d` *dir*	Specify where to place generated class files.
`-J` *runtime_flag*	Pass argument to the java interpreter.

servletReg

The `servletReg` command registers a servlet with the application server.

Usage: `servletReg -i inputFile [-t] [-o outputFile]`

Where subcommands are:

Table 56 servletReg subcommands

Subcommand	Description
`-i`	Specifies input `appInfo.ntv` file.

Table 56 servletReg subcommands *(Continued)*

Subcommand	Description
`-t`	Only creates GXR file (does not register servlets).s
`-o`	Specifies output GXR file.

webappreg

The `webappreg` command is deprecated. Use the `iasdeploy` command instead.

version

The `version` command displays the current installed version of iPlanet Application Server in the shortened “release / service pack” format.