

Everyplace Wireless Gateway for Multiplatforms



Command Reference

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Command Reference

Note

Before using this document, read the general information under “Notices” on page 17.

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This edition applies to all subsequent releases and modifications until otherwise indicated in new editions.

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About this information

This information describes the IBM Everyplace Wireless Gateway for Multiplatforms commands and can be used as a guide to writing command scripts that perform common Wireless Gateway tasks.

The Wireless Gateway Java® administration user interface is the Wireless Gatekeeper, which permits you to execute commands and checks the validity of the parameters to make sure that the syntax is accurate and that values are not out-of-range. The command line has no filter for values that are out-of range or command syntax that is not accurate. When you issue a command using the command line, the Wireless Gateway executes the command even if the values are out-of range. The information in this command reference is not tested and you use it at your own risk. Use the Wireless Gatekeeper to ensure that you do not encounter inaccurate command syntax or out-of-range value errors.

Who should use this information

This information is intended for administrators who want to use the Wireless Gateway commands. Administrators must log in as root or have system group access to perform these commands.

How to use this information

The Wireless Gateway has resources, which are referred to in this reference information as object classes. All object classes have attributes, which are properties of an object class that can be configured. There are four object classes which are further categorized into object types. For example, the object class `wlMnc` has object types such as `smpp`, `dial-tcp`, or `ip-lan`. Each object class has a `keyValue` field. Object classes and object types and some `keyValue` fields cannot be configured, but all other attributes are configurable.

To determine the `keyValue` field for a given object class, issue the command `lswg -s objectclass` or, if the object class has object types, issue the command `lswg -s objectclass -t objecttype`. Look at the list of distinguished names returned. The string up to first equal sign (=) is the `keyValue` field and the string after the first equal sign is the value of that `keyValue` field. With the exception of `wlDevice`, if the object class has object types, the `keyValue` for that object class is the common name (cn) which is assigned at the time the resource is created.

The `keyValue` fields for the object class `wlDevice` include:

Device type	keyValue field
ardis	Logical link identifier (LLI)
datatac	Logical link identifier (LLI)
dataradio	Mobile radio modem (MRM)

dial	Consists of a combination of country, area, personal, and company codes and is specified after it is created by the common name (cn).
ip-lan	IP address
mobitex	Mobitex access number (MAN)
rnc-3000	Logical link identifier (LLI)
sms	Short message service (SMS) address, typically a PLMN or MSISDN phone number

Object class configuration data is stored in a Lightweight Directory Access Protocol (LDAP) database and some commands require that you use X.500 notation.

A command is a request to perform an operation or run a program. You use commands to tell the Wireless Gateway what task you want it to perform. When commands are entered, they are deciphered by a command interpreter (also known as a shell) and that task is processed.

Some commands can be entered simply by typing one word. It is also possible to combine commands so that the output from one command becomes the input for another command. This is known as pipelining.

Flags further define the actions of commands. A flag is a modifier used with the command name on the command line, usually preceded by a dash. The order in which the flags are specified does not affect command execution.

Commands can also be grouped together and stored in a file. These are known as shell procedures or shell scripts. Instead of executing the commands individually, you execute the file that contains the commands. The precise syntax required for scripts will vary based on the command interpreter being used. Note that all object classes, object types, and attributes are case sensitive.

To determine the exit status of an executed command, use the `echo $?` command.

Highlighting conventions

Bold Identifies commands and graphical objects such as buttons, labels, and icons that the user selects.

Italic Identifies parameters whose actual names or values are to be supplied by the user.

Monospace

Identifies examples of specific data values, examples of text similar to what you might see displayed, examples of portions of program code similar to what you might write as a programmer, messages from the system, or information you should actually type.

Command format

Purpose

A description of the major function of each command.

Syntax Usage statement of the command line options.

Description

A discussion of the command describing its function and use.

Flags A list of command line flags and associated variables with an explanation of how the flags modify the action of the command.

Examples

Specific examples of how you can use the command from the command line.

Alphabetical listing of commands

chwg Command

Purpose

Use the chwg command to modify the properties of object classes and their attributes associated with the Wireless Gateway.

Syntax

```
chwg
  -a attribute=value
  -l target
  -r target
  -s objectclass
  -t objecttype
```

Description

Use this command to perform tasks, such as setting specific values of object classes, resetting Wireless Client sessions, or resetting log files.

Use the “lswg” on page 3 command to determine the present value of object classes, their attributes, and keyValue fields.

Flags

-a *attribute=value*

Sets the attribute to the given value. If the value contains spaces, it must be wrapped in single quotes.

-l *target*

Use this flag in conjunction with other flags to determine the object on which the desired action takes place. In this case, the target can be:

- Fully-qualified distinguished name of the resource in X.500 notation. Use the -a flag to set the value of an attribute.
- The value of a keyValue field. Use the -s flag to specify the object class to which the keyValue field refers.

-r *target*

Reset flag used to reset Wireless Client user accounts or reset trace and account log files. When resetting a Wireless Client account, the Wireless Gateway forces the Wireless Client to logoff and clears the associated session. In this case, the *target* can be:

- Individual user account as identified by the IP address of the Wireless Client session.
- Fully-qualified distinguished name of the user account in X.500 notation. For example, uid=violet,ou=users,o=ibm,c=us.

- **trace** - Resets the trace log file by renaming the old file and beginning a new one. A timestamp (.YY.MM.DD) is appended to the filename of the log file, then the logging begins again in the wg.trace file.
- **log** - Resets the account log file by renaming the old file and beginning a new one. A timestamp (.YY.MM.DD) is appended to the filename of the log file, then the logging begins again in the wg.log file.
- **all** - Resets both trace and account log files by renaming the old files and beginning new ones. A timestamp (.YY.MM.DD) is appended to the filename of the log files, then the logging begins again.

Note: This flag works only when information about accounting and billing data is stored in a file. If you are using a ODBC-compliant relational database for accounting data, this command does not reset the account logging.

-s *objectclass*

Use this flag in conjunction with other flags to specify the object class for which you want the task performed.

-t *objecttype*

Use this flag in conjunction with the -s flag to further specify the object type within the object class for which you want the task performed. Object classes that have object types include: wIMnc, wIGroup, wIDevice, wIPkmap, and wIFilter.

Examples

1. To reset all log files:

```
chwg -r all
```
2. To clear a specific session out of the Wireless Gateway:

```
chwg -r 193.127.2.4
```

where 193.127.2.4 is the IP address of the Wireless Client session
or

```
chwg -r uid=violet,ou=users,o=ibm,c=us
```

where uid=violet,ou=users,o=ibm,c=us is the distinguished name of user.
3. To modify an attribute of a resource:

```
chwg -s wIUser -l klaus -a mail=mymail@us.ibm.com
```

where wIUser is the object class, klaus is the value of the keyValue field for that object class (in this case, uid), mail is the attribute and mymail@us.ibm.com is the value to be set.
or

```
chwg -l uid=klaus,ou=users,o=ibm,c=us -a mail=mymail@us.ibm.com
```

where uid=klaus,ou=users,o=ibm,c=us is the distinguished name of the resource and mail=mymail@us.ibm.com is the attribute value pair.
4. To modify multiple attributes, specify the -a flag for each attribute of the resource you want to change:

```
chwg -s objectclass -l keyValue -a attribute=value -a attribute=value...
```

or

```
chwg -l distinguished name of resource -a attribute=value -a  
attribute=value...
```

5. To reset a user password:

```
chwg -s wUser -l violet -a userPassword=newpassword -a failedlogin=0 -a  
admchg=1
```

where *wUser* is the object class, *violet* is the uid value, and *newpassword* is the new password.

6. To recycle an MNC:

```
First, stop it: chwg -s wMnc -l mobitex-tcp0 -a state=1
```

```
Then, start it again: chwg -s wMnc -l mobitex-tcp0 -a state=0
```

where *mobitex-tcp0* is the common name of the MNC

Iswg

Purpose

Use the `iswg` command to list the properties of object classes and their attributes associated with the Wireless Gateway.

Syntax

`iswg`

```
-a attribute=value  
-b filter  
-c command ID  
-d scope  
-F attribute:attribute...  
-g  
-H  
-l target  
-m administrator ID  
-O  
-s objectclass  
-t objecttype  
-T  
-V  
-w administrator password  
-X
```

Description

Use this command to filter and list specific values of object classes or their attributes.

To list valid object classes, issue the command `lswg -T`. To list valid attributes for a given object class, issue the command `lswg -s objectclass`.

To determine the `keyValue` field for a given object class, issue the command `lswg -s objectclass` and look at the list of distinguished names returned. The string up to first equal sign (=) is the `keyValue` field and the string after the first equal sign is the value of that `keyValue` field. With the exception of `wlDevice`, if the object class has object types, the `keyValue` for that object class is the common name (`cn`) and is assigned at the time the resource is created. For a list of `keyValue`

Flags

-a *attribute=value*

Lists the distinguished names of the attributes which match the given value. If the value contains spaces, it must be wrapped in single quotes.

-b *filter* Use this flag in conjunction with other flags to specify a base point on the directory information tree to start the search. The *filter* must be specified in X.500 notation. This flag helps reduce the amount of time spent searching a large directory service. If any part of the point of the tree contains spaces, the entire *filter* must be wrapped in single quotes.

-c *command ID*

Used exclusively by the Wireless Gatekeeper, this flag is used to determine which command is issued and the response to which the command refers. You do not use this flag on a command line, however, you may see this command in the access manager (`wgmgrd.log`) file.

-d *scope*

Use this flag in conjunction with other flags to specify the number of levels to search in the directory information tree. Valid values for *scope* are 0, 1, and 2. A value of 0 searches only the top-level of the tree. A value of 1 searches the top two levels of the tree. The default value is 2, which searches all levels of the tree.

-F *attribute:attribute...*

Use this flag in conjunction with other flags to list the values of attributes for a given object class. Separate each attribute you want listed with a colon.

-g Used exclusively by the Wireless Gatekeeper, this flag is used to determine what kind of command is issued, for example to distinguish between a search and a list operation. You do not use this flag on a command line, however, you may see this command in the access manager (`wgmgrd.log`) file.

-H Suppresses the header line that is returned for output that is in columns. Use this flag when piping the output into other commands.

-I *target*

Use this flag in conjunction with other flags to determine the fully-qualified distinguished name of an object or to return specific values of attributes. In this case, *target* can be:

- The value of a `keyValue` field.

- The fully qualified distinguished name of an object in X.500 notation. Use this command with the -F flag to return specific attributes for a given object.

-m *administrator ID*

Used exclusively by the Wireless Gatekeeper, this flag is used to determine which access control lists are valid for the given administrator ID. You do not use this flag on a command line, however, you may see this command in the access manager (wgmgrd.log) file.

- O** Returns results in system management interface tool (SMIT) format. This flag is used exclusively on AIX operating systems.

-s *objectclass*

Use this flag in conjunction with other flags to specify the object class for which you want the results returned. Using this flag returns the same results as the command `lswg -a objectclass=objectclass`.

-t *objecttype*

Use this flag in conjunction with the -s flag to further specify the object type within the object class for which you want the results returned. Object classes that have object types include: wIMnc, wIGroup, wIDevice, wIPkmap, and wIFilter.

- T** Generates a list of supported object classes. When you use this flag in conjunction with the -s flag, it generates a list of all attributes for the given object class as specified by the -s flag. When you use this flag in conjunction with the -X flag, it generates an XML list of all attributes for all object classes.

- V** Lists the version, copyright, compilation date, and components which are part of the Wireless Gateway.

-w *administrator password*

Used exclusively by the Wireless Gatekeeper, this flag is used to determine the password for the administrator ID specified by the -m flag. You do not use this flag on a command line, however, you may see this command in the access manager (wgmgrd.log) file.

- X** Returns results in XML format.

Examples

1. To generate a list of object classes:
`lswg -T`
2. To generate a list of attributes for a specific object class. This will list all attributes, a description, default value, range, and list of possible values if applicable.
`lswg -T -s objectclass`
3. Certain object classes have object types to further delineate them. If you use the previous lswg command on an object class that has subtypes, it lists the object types instead of the attributes. To list the attributes for an object class that has object types:
`lswg -T -s objectclass -t objecttype`
4. There are several ways to list resources that have been defined. To list all the distinguished name of all users:

```
lswg -s wUser
```

or

```
lswg -a objectclass=wUser
```

5. To list the values of specific attributes for a given object class. In this case, the object class is wUser and this command displays the common name, user ID, and last login timestamp of all users in the database:

```
lswg -s wUser -F cn:uid:lastlogin
```

6. To list all active users on the system:

```
lswg -a objectclass=wUser -a activestatus=1
```

mkwg

Purpose

Use the mkwg command to create an instance of an object class and set its attributes.

Syntax

mkwg

-a *attribute=value*

-b

-s *objectclass*

-t *objecttype*

-Z

Description

The **-s** and the **-a** flags are mandatory for the mkwg command. If an object class has object types, then the **-t** flag is also mandatory. Object classes that have object types include wIMnc, wIGroup, wIDevice, wIPkmap, and wIFilter.

When you add resources, at a minimum you must specify the value for the attribute `primaryou` and the value of the `keyValue` field for the object class. The `primaryou` attribute specifies, in X.500 notation, where in the directory information tree the resource is added.

To determine the `keyValue` field for a given object class, issue the command `lswg -s objectclass` (or `lswg -s objectclass -t objecttype`) and look at the list of distinguished names returned. The string up to first equal sign (=) is the `keyValue` field.

Some object classes also have required attributes that must be specified when they are created. To determine the required attributes for an object class, issue the command `lswg -s objectclass -T`. The third column of information returned indicates whether an attribute is required (Y).

Flags

- a** *attribute=value*
Sets the attribute to the given value. If the value contains spaces, it must be wrapped in single quotes. This flag is mandatory.
- b** *filter* Used exclusively by the Wireless Gatekeeper, this flag is used to specify a base point on the directory information tree. to start the operation. The *filter* is specified in X.500 notation. You do not use this flag on a command line, however, you may see this command in the access manager (wgmgrd.log) file.
- s** *objectclass*
Use this flag in conjunction with other flags to specify the object class for which you want the instance of the resource created. This flag is mandatory.
- t** *objecttype*
Use this flag in conjunction with the **-s** flag to further specify the object type within the object class that you want created.
- Z** Forces the Wireless Gateway to check the DB2[®] configuration and LDAP schema and update them if required. Use this flag after updating the Wireless Gateway code.

Examples

1. To add an organizational unit (OU):

```
mkwg -s w1Ou -a ou='All Administrators' -a primaryou=o=ibm,c=us
```

where *ou* is the keyvalue for the object class *w1Ou*, *All Administrators* is the desired name of the OU, and *primaryou=o=ibm,c=us* is the attribute (primaryou) value (*o=ibm,c=us*) pair that defines where in the directory tree the OU is added.
2. To add a user:

```
mkwg -s w1User uid=Isadora -a primaryou=ou=Users,o=ibm,c=us
```

where *uid* is the keyvalue for the object class *w1User*, *Isadora* is the desired user ID, and *primaryou=ou=Users,o=ibm,c=us* is the attribute (primaryou) value (*ou=Users,o=ibm,c=us*) pair that defines where in the directory tree the user ID is added.
3. To add an SMS mobile device:

```
mkwg -s w1Device -t sms -a smsaddress=012125551212 -a primaryou='ou=All Devices,o=ibm,c=us'
```

where *sms* is the object type of the object class *w1Device*, *smsaddress* is the PLMN or MSISDN number of the SMS device, and *primaryou='ou=All Devices,o=ibm,c=us'* is the attribute value pair that defines where in the directory tree the device is added.
4. To add a dial mobile device:

```
mkwg -s w1Device -t dial -a areacode=919 -a personalid=5551212 -a primaryou='ou=All Devices,o=ibm,c=us'
```

where *dial* is the object type of the object class *w1Device*, *areacode* and *personalid* are the attribute value pairs which uniquely define the device, and *primaryou='ou=All Devices,o=ibm,c=us'* is the attribute value pair that defines where in the directory tree the device is added.

rmwg

Purpose

Use the `rmwg` command to delete an instance of an object class.

Syntax

```
rmwg  
  -l target  
  -s objectclass  
  -t objecttype
```

Description

You can either use the `-l` flag or the `-s` flag to determine which resource is deleted. If you do not use the `-l` flag when using the `-s` flag, then the command is executed and the first occurrence of the object class specified by the `-s` flag is deleted. When using the `-s` flag for an object class that has object types, then the `-t` flag is mandatory.

Flags

-l *target*

Specifies which resource is to be deleted. In this case, *target* can be:

- The value of a keyvalue field.
- The fully qualified distinguished name of an object in X.500 notation.

-s *objectclass*

Specifies the object class for which you want the resource deleted. Make sure to also use the `-l` flag to specify which object is deleted.

-t *objecttype*

Use this flag in conjunction with the `-s` flag to further specify the object type within the object class that you want deleted.

Examples

1. To remove a user:

```
rmwg -l uid=olaf,ou=users,o=ibm,c=us
```

where `uid=olaf,ou=users,o=ibm,c=us` is the distinguished name of the user you want deleted.

2. To remove a mobile device:

```
rmwg -s wlDevice -t sms -l 012125551212
```

where `012125551212` is the value of `smsaddress`, which is the keyvalue field for the object type `sms` and object class `wlDevice`.

startsrc (AIX only)

Purpose

Use the startsrc command to start the Wireless Gateway subsystem, w gated.

Syntax

startsrc -s w gated

Description

The startsrc command is an AIX operating system command that tells the System Resource Controller to start the Wireless Gateway.

Flags

Although there are other flags that are applicable to the startsrc command, only the -s flag and the name of the Wireless Gateway subsystem, w gated are needed.

Example

To start the Wireless Gateway: `startsrc -s w gated`

stopsrc (AIX only)

Purpose

Use the stopsrc command to stop the Wireless Gateway subsystem, w gated.

Syntax

stopsrc -s w gated

Description

The stopsrc command is an AIX operating system command that tells the System Resource Controller to stop the Wireless Gateway.

Flags

Although there are other flags that are applicable to the stopsrc command, only the -s flag and the name of the Wireless Gateway subsystem, w gated are needed.

Example

To stop the Wireless Gateway: `stopsrc -s w gated`

wg_acct

Purpose

Access and display the account records in a number of different formats and filtered according to criteria based on the flags passed.

Syntax

wg_acct

- c** *MNCType*
- C**
- d**
- e** *End*
- f**
- F** *OutFileName*
FileName
- h**
- I** *Count*
- m** *MobileClient*
- M** *MobileMask*
- n**
- o** *OtherDevice*
- O** *OtherMask*
- s** *Start*
- S**
- t**
- T** *login|logout|connect|disc|session|hold|pkt|wap|pkt|sms|pkt*
- u** *Userid*

Description

Use the `wg_acct` command to access and display the account records in a number of different formats and filtered according to criteria based on the flags passed.

When you run `wg_acct`, it generates column headers on the first line, followed a line-by-line detailed output of every packet in the record.

Note that most commands require the flag `wg_acct -T pkt` to see the Wireless Client traffic.

Enter `wg_acct -?` to list the usage statement.

Flags

- c** *MNCType*
Filters packets for packets on a given MNC. Valid values for *MNCType* include the names of MNCs, such as `ardis-tcp` or `dataradio-msc`.
- C** Generates a compressed format by reducing the number of columns, such as the timestamp and user ID columns.
- d** Generates a summary based on the IP addresses of all connected Wireless Clients, mobile devices, or WAP clients.

- e End** End time for packet filter as specified by *End* timestamps within the account log file.
- f** Does not stop at end-of-file, but continues running and displaying new entries as they occur (similar to tail -f).
- F OutFileName**
Direct output to *OutFileName* (default = stdout)
- FileName**
Read input from *FileName*. This parameter is only available when storing accounting and billing records in a file. (default = /var/adm/wgacct)
- h** Does not generate the column header line. When you run wg_acct, it generates column headers on the first line. Use this flag to suppress the column headers.
- I Count**
Skips the first *Count*-1 records and begins processing input at packet record number *Count*, where *Count* is an integer.
- m MobileClient**
Filters packets for a given IP address, where *MobileClient* equals a dotted-decimal IP address or host name
- M MobileMask**
Filters packets from all addresses that are within a subnet (*MobileMask*). This option lets you apply a subnet mask to the IP address as specified in the -m parameter.
- n** Reverse the current packet filter to display only packets that would have been ignored.
- o OtherDevice**
Filters packets for the IP address on the other end of the packet, where *OtherDevice* equals a dotted-decimal IP address or host name. For example, if you want to see all packets going to or coming from 38.38.130.9, you could specify -o 38.38.130.9
- O OtherMask**
Filters packets from all addresses that are within a subnet. This option lets you apply a subnet mask (*OtherMask*) to the IP address as specified in the -o parameter.
- p Days**
Purge database records that are older than the specified days. Combine the p flag with the T flag to specify the packet type to delete.
- s Start** Start time for packet filter as specified by *Start* timestamps within the account log file.
- S** Does not check the version. The Wireless Gateway inserts a version record into the log at start-up to indicate the format. If wg_acct checks this format and does not understand it, the command does not execute. Use this flag to skip the version check and execute the command.
- t** Generates only a summary. Instead of generating a line-by-line detailed output

of every packet in the file, this flag generates a summary of the number of bytes transmitted/received, compression, header reduction, encryption etc.

-T [login|logout|connect|disc|session|hold|pkt|wappkt|smspkt]

Filters packets based on type (default = wappkt)

-u *UserID*

Filters packets for the given user ID.

Examples

1. To delete all records older than 90 days:
`wg_acct -p 90`
2. To delete all records in all tables:
`wg_acct -p 0`
3. To delete all records older than 30 days in the WLP data packet table:
`wg_acct -p 30 -T pkt`
4. To delete all session records.
`wg_acct -p 0 -T session`
5. To filter packets for a given type, such as logout packets:
`wg_acct -T logout`
6. To filter packets for a user ID:
`wg_acct -u sunny`
where *sunny* is the user ID
7. To filter packets for an IP address or host name:
`wg_acct -m lachrymose`
where *lachrymose* is the host name of the Wireless Client
8. To filter packets for a subnet:
`wg_acct -M 255.255.255.0`
where *255.255.255.0* is the subnet mask.
9. To filter packets for an MNC type:
`wg_acct -c sms`
where *sms* is the MNC type
10. To filter packets beginning at 13:13:
`wg_acct -s 13:13`
where *13:13* is the start time.

wg_monitor

Purpose

Use the `wg_monitor` command to view packet flow through the Wireless Gateway.

Syntax

wg_monitor

- g *gateway*
- p *port*
- s *refresh rate*

Description

Figure 1 shows a sample view of the wg_monitor utility. Note that the wg_monitor utility displays only the resources for which the Wireless Gateway is configured and is available only in English.

Wireless Gateway System Monitor: wireless.yourdomain.com ①											
Uptime: 13 days, 01:53 Sessions: 251 Rate: 37 Peak: 46											
Load Average: 0.54 0.38 0.62											
Pkt/sec	25	50	75	100	125	150	175	200	225	250	②
IN:	██										
OUT:	██										
	③		④	IN	OUT	AVG	PEAK	TOTAL	kb/s	kb	
Filt	1352		IP/WLP	52.3	23.4	35.0	81.6	94230	70.0	72231	
SNMP	177		WAP	72.6	90.4	80.0	94.3	132288	74.1	98431	
Disc	761		MSG GW	25.0	9.8	17.4	34.2	1789	9.2	16321	
RX	524		CMP	25.1	11.2	17.5	13.1	1200	7.3	13222	
Br q (U)	7		Auth q	44							
Br q (D)	5		Lgin q	23							
MSG q	2										
D MSG q	15			⑤							
		⑦									
WAP Service(s)	IN	OUT	QUEUE								
browse-9203	23.4	12.1	62								
browse-9201	11.6	28.4	40								
browse-9202	22.6	37.7	81								
browse-9200	17.4	6.8	19								
							⑥	IN	OUT	TOTAL	
							ip-wdp1	56.3	39.9	61034	
							ip-lan0	49.6	20.2	94230	
							ip-wdp0	43.7	45.1	5110	
							sms-ucp0	25.4	9.8	1789	

Figure 1. Sample view of wg_monitor

Table 1. Description of sample view of wg_monitor

Identifier in Figure 1 on page 13	Description
1	<p>Lists the host name of the Wireless Gateway that is monitored and the amount of time since it was last started.</p> <p>Sessions Number of active sessions that the Wireless Gateway is handling.</p> <p>Rate Number of session that are activated per second.</p> <p>Peak Highest value of sessions that were activated per second since the invocation of the utility.</p> <p>Load average Average CPU load over the last 1, 5, and 15 minutes, respectively.</p>
2	<p>Displays a dynamic bar chart of the inbound (IN) and outbound (OUT) packet flow per seconds. When the packet flow exceeds 250 packets/second, the scale changes increments from 25 to 50 packets/second.</p>
3	<p>Lists the cumulative packet count since the Wireless Gateway was last started:</p> <p>Filt Number of packets that are discarded based on configured filters on the mobile access services.</p> <p>SNMP Number of packets that are discarded from network management events.</p> <p>Disc Number of packets discarded because of the mobile access services TCP optimization.</p> <p>RX Number of TCP packets that are retransmitted.</p>
4	<p>Lists the number of packets or messages using the mobile access services designed as IP/WLP (Internet Protocol/wireless optimized link protocol), WAP (WAP proxy), MSG GW (messaging gateway), or CMP (cluster management protocol):</p> <p>IN The number of packets per second inbound to the Wireless Gateway.</p> <p>OUT The number of packets per second outbound from the Wireless Gateway.</p> <p>AVG The average number of packets both inbound and outbound per second.</p> <p>PEAK The highest value of packets per second for inbound or outbound traffic since the invocation of the wg_monitor utility.</p> <p>TOTAL A count of the total number of packets sent or received since the invocation of the wg_monitor utility.</p> <p>kb/s The rate of number of kilobytes (KB) sent or received per second.</p> <p>kb A count of the total kilobytes (KB) sent or received since the last time the Wireless Gateway was started.</p>

Table 1. Description of sample view of *wg_monitor* (continued)

Identifier in Figure 1 on page 13	Description
5	<p>A list of the number of packets or messages in internal queues:</p> <p>Br q (U) The number of WAP packets in the broker queue waiting to be processed as upward or inbound traffic.</p> <p>Br q (D) The number of WAP packets in the broker queue waiting to be processed as downward or outbound traffic.</p> <p>MSG q The number of messages queued in the messaging gateway for immediate delivery.</p> <p>D MSG q The number of messages queued in the messaging gateway for delayed delivery.</p> <p>Auth q The number of WAP packets which are requests waiting in queue for authentication.</p> <p>Lgin q The number of WAP packets which are authenticated but not yet reflected in persistent storage that the requests have been processed.</p>
6	<p>A list of the number of packets for each MNC configured on the Wireless Gateway:</p> <p>IN The number of packets per second inbound to the MNC.</p> <p>OUT The number of packets per second outbound from the MNC.</p> <p>TOTAL A count of the total number of packets sent or received since the last time the Wireless Gateway was started.</p>
7	<p>A list of the number of packets for each WAP service configured on the WAP proxy:</p> <p>IN The number of packets per second inbound to the WAP service.</p> <p>OUT The number of packets per second outbound from the WAP service.</p> <p>QUEUE The number of transactions waiting to be processed by the WAP service.</p>

Flags

-g gateway

The host name or IP address of the Wireless Gateway to monitor. The default is localhost.

-p port Specifies the TCP port that the Wireless Gateway listens on. The default port number is 9557.

-s refresh rate

Seconds between the displayed view and the refreshed view. The default setting is 10 seconds.

wgstart (Solaris only)

Purpose

Use the `wgstart` command to start the Wireless Gateway.

Syntax

`wgstart`

Description

The `wgstart` command starts the Wireless Gateway.

Flags

There are no flags for this command.

Examples

To start the Wireless Gateway: `wgstart`

wgstop (Solaris only)

Purpose

Use the `wgstop` command to stop the Wireless Gateway.

Syntax

`wgstop`

Description

The `wgstop` command stops the Wireless Gateway.

Flags

There are no flags for this command.

Examples

To stop the Wireless Gateway: `wgstop`

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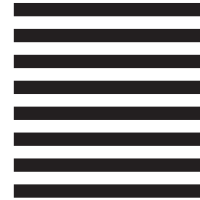
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