



Predefined Optimization Policy

The WAAS software includes over 200 predefined optimization policy rules that help your WAAS system classify and optimize some of the most common traffic on your network. [Table A-1](#) lists the predefined applications and class maps that WAAS will either optimize or pass through based on the policy rules that are provided with the system.

Before you create an optimization policy, we recommend that you review the predefined policy rules and modify them as appropriate. Often, you can more easily modify an existing policy rule than create a new one.

When reviewing [Table A-1](#), note the following information:

- The subheadings represent the application names, and the associated class maps are listed under these subheadings. For example, Authentication is a type of application and Kerberos is a class map for that application.
- Applications and class maps with the word (*monitored*) next to them are monitored by the WAAS Central Manager, which can monitor statistics for up to 25 applications and 25 class maps at a time. To view statistics for one of the unmonitored applications, use one of the following methods:
 - Use the WAAS CLI, which can display statistics for all applications and class maps on a WAAS device. For more information, see the *Cisco Wide Area Application Services Command Reference*.
 - Modify the application or class map settings so the WAAS Central Manager GUI displays statistics for the desired application or class map. For more information, see [Chapter 12, “Configuring Application Acceleration.”](#)
- WAAS Express devices have similar default policy rules but provide application acceleration only for HTTP, SSL, and SMB traffic. Where a different application accelerator is listed in [Table A-1](#), it is not part of the WAAS Action for a WAAS Express device.

The WAAS software uses the following optimization technologies based on the type of traffic that it encounters:

- TFO (transport flow optimization)—A collection of optimization technologies such as automatic windows scaling, increased buffering, and selective acknowledgement that optimize all TCP traffic over your network.
- DRE (data redundancy elimination)—A compression technology that reduces the size of transmitted data by removing redundant information before sending the shortened data stream over the WAN. DRE operates on significantly larger streams and maintains a much larger compression history than LZ compression. DRE can use bidirectional, unidirectional, or adaptive caching. Unless noted in [Table A-1](#), DRE caching is bidirectional.
- LZ (compression)—Another compression technology that operates on smaller data streams and keeps limited compression history compared to DRE.

- Application accelerator—A collection of individual application accelerators for the following traffic types: EPM, HTTP, ICA, MAPI, NFS, SSL, and streaming video. (Some application accelerators are not available on WAAS Express devices.)

Table A-1 Predefined Traffic Policy Rules

| Application/Class Map | WAAS Action | Destination Ports |
|---|-------------------------------|--|
| class-default (<i>monitored</i>) | LZ+TFO+ DRE-adaptive | All ports not included in other class maps |
| Authentication | | |
| apple-sasl | Passthrough | 3659 |
| auth | Passthrough | 113 |
| Kerberos | Passthrough | 88, 888, 2053 |
| kerberos-adm (<i>monitored</i>) | Passthrough | 749 |
| klogin | Passthrough | 543 |
| kpasswd | Passthrough | 464 |
| kshell | Passthrough | 544 |
| TACACS | Passthrough | 49 |
| tell | Passthrough | 754 |
| Backup (<i>monitored</i>) | | |
| Amanda | TFO | 10080 |
| backup-express | TFO | 6123 |
| CommVault | TFO | 8400–8403 |
| connected | TFO | 16384 |
| IBM-TSM | LZ+TFO+ DRE-unidirectional | 1500-1502 |
| Legato-NetWorker | TFO | 7937, 7938, 7939 |
| Legato-RepliStor | TFO | 7144, 7145 |
| Veritas-BackupExec (<i>monitored</i>) | TFO | 1125, 3527, 6101, 6102, 6106 |
| Veritas-NetBackup | TFO | 13720, 13721, 13782, 13785 |
| CAD | | |
| PDMWorks | LZ+TFO+DRE | 30000, 40000 |
| Call-Management | | |
| Cisco-CallManager | Passthrough | 2443, 2748 |
| cisco-q931-backhaul | Passthrough | 2428 |
| cisco-sccp | Passthrough | 2000–2002 |
| h323hostcall | Passthrough | 1720 |
| h323hostcallsc | Passthrough | 1300 |
| mgcp-callagent | Passthrough | 2727 |
| mgcp-gateway | Passthrough | 2427 |
| sip | Passthrough | 5060 |

Table A-1 Predefined Traffic Policy Rules (continued)

| Application/Class Map | WAAS Action | Destination Ports |
|---|---------------------------|--|
| sip-tls | Passthrough | 5061 |
| VoIP-Control | Passthrough | 1718, 1719, 11000–11999 |
| Citrix | | |
| Citrix (<i>monitored</i>) | TFO+ ICA accelerator | 1494, 2598, or a dynamic port associated with the citrix protocol match |
| Conferencing | | |
| cuseeme | Passthrough | 7640, 7642, 7648, 7649 |
| ezMeeting | Passthrough | 10101–10103, 26260, 26261 |
| MS-NetMeeting (<i>monitored</i>) | Passthrough | 522, 1503, 1731 |
| proshare | Passthrough | 5713–5717 |
| PSOM-MTLS | Passthrough | 8057 |
| VocalTec | Passthrough | 1490, 6670, 25793, 22555 |
| Console | | |
| cmd | Passthrough | 514 |
| exec | Passthrough | 512 |
| login | Passthrough | 513 |
| sshell | Passthrough | 614 |
| Telnet | Passthrough | 23, 107 |
| Telnets | Passthrough | 992 |
| Content-Management (<i>monitored</i>) | | |
| dmdocbroker | LZ+TFO+DRE | 1489 |
| Filenet | LZ+TFO+DRE | 32768–32774 |
| Directory-Services (<i>monitored</i>) | | |
| LDAP | LZ+TFO+DRE-unidirectional | 389, 8404 |
| ldaps | Passthrough | 636 |
| msft-gc | LZ+TFO+DRE-unidirectional | 3268 |
| msft-gc-ssl | Passthrough | 3269 |
| Email-and-Messaging (<i>monitored</i>) | | |
| ccmail | LZ+TFO+DRE | 3264 |
| groupwise | LZ+TFO+DRE | 1677, 2800, 3800, 7100, 7101, 7180, 7181, 7205, 9850 |
| imap | LZ+TFO+DRE | 143 |
| imap3 | LZ+TFO+DRE | 220 |
| imaps | TFO | 993 |
| iso-tsap | LZ+TFO+DRE | 102 |

Table A-1 Predefined Traffic Policy Rules (continued)

| Application/Class Map | WAAS Action | Destination Ports |
|--|---------------------------------|---|
| lotusnote | LZ+TFO+DRE | 1352 |
| MAPI ¹ (monitored) | LZ+TFO+DRE+ MAPI accelerator | UUID:a4f1db00-ca47-1067-b31f-00dd0106 62da |
| MDaemon | LZ+TFO+DRE | 3000, 3001 |
| MS-Exchange-Directory-NSPI ¹ | Passthrough | UUID:f5cc5a18-4264-101a-8c59-08002b2f 8426 |
| MS-Exchange-Directory-RFR ¹ | Passthrough | UUID:1544f5e0-613c-11d1-93df-00c04fd7 bd09 |
| NNTP (monitored) | LZ+TFO+DRE | 119 |
| nntps (monitored) | TFO | 563 |
| openmail | LZ+TFO+DRE | 5755, 5757, 5766, 5767, 5768, 5729 |
| pcmail-srv | LZ+TFO+DRE | 158 |
| pop3 | LZ+TFO+DRE | 110 |
| pop3s | LZ+TFO+DRE | 995 |
| QMTP | TFO | 209 |
| smtp (monitored) | LZ+TFO+DRE | 25 |
| smtps | TFO | 465 |
| Enterprise-Applications (monitored) | | |
| MS-GROOVE | TFO | 2492 |
| SAP (monitored) | LZ+TFO+DRE | 3200–3204, 3206–3219, 3221–3224, 3226–3259, 3261–3263, 3265–3267, 3270–3282, 3284–3305, 3307–3351, 3353–3388, 3390–3399, 3600–3658, 3662–3699 |
| Siebel | LZ+TFO+DRE | 2320, 2321, 8448 |
| File-System (monitored) | | |
| afpovertcp | LZ+TFO+DRE | 548 |
| afs3 | LZ+TFO+DRE | 7000–7009 |
| ncp | LZ+TFO+DRE | 524 |
| NFS | LZ+TFO+DRE+ NFS accelerator | 2049 |
| sunrpc | Passthrough | 111 |
| File-Transfer (monitored) | | |
| BFTP | LZ+TFO+DRE | 152 |
| ftp (monitored) | Passthrough | 21 |
| ftp-data ² | LZ+TFO+DRE | 20 (source port) |
| ftps | TFO | 990 |
| ftps-data ² | Passthrough | 989 (source port) |

Table A-1 Predefined Traffic Policy Rules (continued)

| Application/Class Map | WAAS Action | Destination Ports |
|-------------------------------|-------------------------|---|
| sftp | LZ+TFO+DRE | 115 |
| TFTP | LZ+TFO+DRE | 69 |
| TFTPS | TFO | 3713 |
| Instant Messaging | | |
| AOL | Passthrough | 5190–5193 |
| Apple-iChat | Passthrough | 5297, 5298 |
| ircs | Passthrough | 994 |
| ircu | Passthrough | 531, 6660–6665, 6667–6669 |
| msnp | Passthrough | 1863, 6891–6900 |
| sametime | Passthrough | 1533 |
| talk | Passthrough | 517 |
| xmpp-client | Passthrough | 5222 |
| xmpp-server | Passthrough | 5269 |
| Yahoo-Messenger | Passthrough | 5000, 5001, 5050, 5100 |
| Name Services | | |
| DNS | Passthrough | 53 |
| isns | Passthrough | 3205 |
| nameserver | Passthrough | 42 |
| netbios | Passthrough | 137 |
| svrloc | Passthrough | 427 |
| WINS (<i>monitored</i>) | Passthrough | 1512 |
| Other | | |
| Basic-TCP-services | Passthrough | 1–19 |
| BGP | Passthrough | 179 |
| corba-iiop-ssl | Passthrough | 684 |
| epmap (<i>monitored</i>) | TFO, EPM accelerator | 135 |
| msmq | LZ+TFO+DRE | 1801, 2101, 2103, 2105 |
| NTP | Passthrough | 123 |
| Other-Secure | Passthrough | 261, 448, 695, 994, 2252, 2478, 2479, 2482, 2484, 2679, 2762, 2998, 3077, 3078, 3183, 3191, 3220, 3410, 3424, 3471, 3496, 3509, 3529, 3539, 3660, 3661, 3747, 3864, 3885, 3896, 3897, 3995, 4031, 5007, 7674, 9802, 12109 |
| ssc-agent | LZ+TFO+DRE | 2847, 2848, 2967, 2968, 38037, 38292 |
| Unclassified | LZ+TFO+DRE | |
| P2P (<i>monitored</i>) | | |

Table A-1 Predefined Traffic Policy Rules (continued)

| Application/Class Map | WAAS Action | Destination Ports |
|-----------------------------------|-------------------------------|------------------------------------|
| BitTorrent | Passthrough | 6881–6889, 6969 |
| eDonkey | Passthrough | 4661, 4662 |
| Gnutella | Passthrough | 5634, 6346–6349, 6355 |
| Grouper | Passthrough | 8038 |
| HotLine | Passthrough | 5500–5503 |
| Kazaa | Passthrough | 1214 |
| Laplink-ShareDirect | Passthrough | 2705 |
| Napster | Passthrough | 6666, 6677, 6688, 6700, 7777, 8875 |
| Qnext | Passthrough | 44, 5555 |
| SoulSeek | Passthrough | 2234, 5534 |
| WASTE | Passthrough | 1337 |
| WinMX | Passthrough | 6699 |
| Printing (monitored) | | |
| hp-pdl-datastr | LZ+TFO+DRE | 9100 |
| IPP | LZ+TFO+DRE | 631 |
| printer | LZ+TFO+DRE | 515 |
| print-srv | LZ+TFO+DRE | 170 |
| xprint-server | LZ+TFO+DRE | 8100 |
| Remote-Desktop (monitored) | | |
| Altiris-CarbonCopy | Passthrough | 1680 |
| citrixadmin | LZ+TFO+ DRE-unidirectional | 2513 |
| citrixima | LZ+TFO+ DRE-unidirectional | 2512 |
| citriximaclient (monitored) | LZ+TFO+DRE | 2598 |
| ControlIT | TFO | 799 |
| Danware-NetOp | TFO | 6502 |
| ica (monitored) | LZ+TFO+DRE | 1494 |
| laplink | LZ+TFO+ DRE-unidirectional | 1547 |
| Laplink-surfup-HTTPS | TFO | 1184 |
| ms-wbt-server (monitored) | TFO | 3389 |
| net-assistant | Passthrough | 3283 |
| netrjs-3 | TFO | 73 |
| pcanywheredata | TFO | 5631, 5632, 65301 |
| radmin-port | TFO | 4899 |
| Remote-Anything (monitored) | TFO | 3999, 4000 |

Table A-1 Predefined Traffic Policy Rules (continued)

| Application/Class Map | WAAS Action | Destination Ports |
|---|-------------------------------|---|
| timbuktu | TFO | 407 |
| timbuktu-srv | TFO | 1417–1420 |
| Vmware-VMConsole | TFO | 902 |
| VNC (<i>monitored</i>) | TFO | 5800–5809, 5900–5909 |
| x11 | TFO | 6000–6063 |
| Replication (<i>monitored</i>) | | |
| Double-Take | LZ+TFO+ DRE-unidirectional | 1100, 1105 |
| EMC-Celerra-Replicator | LZ+TFO+ DRE-adaptive | 8888 |
| MS-AD-Replication ¹ | LZ+TFO+DRE | UUID:e3514235-4b06-11d1-ab04-00c04fc2dcd2 |
| ms-content-repl-srv | TFO | 507, 560 |
| MS-FRS ¹ | LZ+TFO+DRE | UUID:f5cc59b4-4264-101a-8c59-08002b2f8426 |
| netapp-snapmirror | LZ+TFO+ DRE-adaptive | 10565-10569 |
| pcsync-http | LZ+TFO+DRE | 8444 |
| pcsync-https | TFO | 8443 |
| rrac | TFO | 5678 |
| Rsync (<i>monitored</i>) | LZ+TFO+ DRE-unidirectional | 873 |
| SQL (<i>monitored</i>) | | |
| gds_db | LZ+TFO+DRE | 3050 |
| IBM-DB2 | LZ+TFO+DRE | 523 |
| intersys-cache | LZ+TFO+DRE | 1972 |
| ms-olap4 | TFO | 2383 |
| ms-sql-m | LZ+TFO+DRE | 1434 |
| MS-SQL-RPC ¹ | LZ+TFO+DRE | UUID:3f99b900-4d87-101b-99b7-aa0004007f07 |
| ms-sql-s (<i>monitored</i>) | LZ+TFO+DRE | 1433 |
| MySQL | LZ+TFO+DRE | 3306 |
| Oracle | LZ+TFO+DRE | 66 |
| orasrv | LZ+TFO+DRE | 1521, 1525 |
| Pervasive-SQL | LZ+TFO+DRE | 1583 |
| PostgreSQL | LZ+TFO+DRE | 5432 |
| sqlexec | LZ+TFO+DRE | 9088, 9089 |
| sql-net | LZ+TFO+DRE | 150 |

Table A-1 Predefined Traffic Policy Rules (continued)

| Application/Class Map | WAAS Action | Destination Ports |
|--|---|---|
| sqlserv | LZ+TFO+DRE | 118 |
| sqlsrv | LZ+TFO+DRE | 156 |
| ssql | LZ+TFO+DRE | 3352 |
| sybase-sqlany | LZ+TFO+DRE | 1498, 2439, 2638, 3968 |
| UniSQL | LZ+TFO+DRE | 1978, 1979 |
| SSH | | |
| SSH (<i>monitored</i>) | TFO | 22 |
| SSL (<i>monitored</i>) | | |
| HTTPS (<i>monitored</i>) | TFO | 443 |
| Storage (<i>monitored</i>) | | |
| EMC-SRDFA-IP | LZ+TFO+DRE | 1748 |
| FCIP | LZ+TFO | 3225 |
| iFCP | LZ+TFO+DRE | 3420 |
| iscsi | LZ+TFO+DRE | 3260 |
| Streaming (<i>monitored</i>) | | |
| Liquid-Audio | LZ+TFO+ DRE-unidirectional | 18888 |
| ms-streaming (<i>monitored</i>) | LZ+TFO+ DRE-unidirectional | 1755 |
| RTSP (<i>monitored</i>) | LZ+TFO+ DRE-unidirectional +Video accelerator | 554, 8554 |
| Systems-Management (<i>monitored</i>) | | |
| BMC-Patrol | Passthrough | 6161, 6162, 6767, 6768, 8160, 8161, 10128 |
| eTrust-policy-Compliance | TFO | 1267 |
| flowmonitor | LZ+TFO | 7878 |
| HP-OpenView | Passthrough | 7426–7431, 7501, 7510 |
| LANDesk | LZ+TFO+DRE | 9535, 9593–9595 |
| NetIQ | Passthrough | 2220, 2735, 10113–10116 |
| Netopia-netOctopus | Passthrough | 1917, 1921 |
| netviewdm | Passthrough | 729–731 |
| novadigm | LZ+TFO+DRE | 3460, 3461, 3464 |
| novell-zen | LZ+TFO+DRE | 1761–1763, 2037, 2544, 8039 |
| objcall | LZ+TFO+DRE | 94, 627, 1965, 1580, 1581 |
| WBEM | Passthrough | 5987–5990 |
| Version-Management (<i>monitored</i>) | | |
| Clearcase | LZ+TFO+DRE | 371 |

Table A-1 Predefined Traffic Policy Rules (continued)

| Application/Class Map | WAAS Action | Destination Ports |
|------------------------|---------------------------------|----------------------------|
| cvspserver | LZ+TFO+DRE | 2401 |
| VPN | | |
| L2TP | TFO | 1701 |
| OpenVPN | TFO | 1194 |
| PPTP | TFO | 1723 |
| Web (monitored) | | |
| HTTP (monitored) | LZ+TFO+DRE+ HTTP accelerator | 80, 3128, 8000, 8080, 8088 |
| soap-http | LZ+TFO+ DRE-adaptive | 7627 |

1. These classifiers use the EPM service in WAAS to accelerate traffic. EPM-based applications do not have predefined ports so the application's UUID must be used to identify the traffic.
2. These classifiers identify the source port instead of the destination port.

