

This article describes the ACE system limits and performance numbers for various resources and configuration objects.

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ACE Performance Numbers and Resource Limits

For the most current performance numbers for the ACE products, always refer to the data sheets for the ACE appliance and the ACE module.

ACE Appliance Data Sheet

[ACE appliance data sheet](#)

ACE Module Data Sheets

[ACE10/ACE20 module data sheet](#)

[ACE30 module data sheet](#)

If you have any questions or concerns related to ACE performance, please contact your Cisco account team for guidance.

SLB-Related Limits

Scalability Numbers The scalability numbers provided here are intended to provide guidelines related to configuration scalability. The scalability numbers, however, are based on basic configurations. In order to obtain scalability numbers specific to your deployment, testing with your feature combination is strongly recommended. If there are any questions or concerns related to ACE performance, please contact your Cisco account team for guidance.

| SLB-Related Object | ACE Module System Limit | ACE Module Context Limit | ACE Appliance Limit | Additional Information |
|--|-------------------------|--------------------------|---------------------|---|
| ARP Entries | 32,768 | 32,768 | 32,768 | |
| Bridge Table Entries | 32,768 | 32,768 | 32,768 | A few are reserved for L2 interfaces, redundancy, and so on. |
| Bridge-Group Virtual Interfaces (BVIs) | 4096 | 2048 | 512 | |
| Concurrent Conns L4 (Unproxied) | 4,000,000 | 4,000,000 | 1,000,000 | |
| Concurrent Connections L7 (Proxied) | 512,000 | 512,000 | 128,000 | |
| Domains | 2,500 | 10 (9) | 10 (9 per context) | One is used for the default domain. |
| Domain Objects | None | None | None | Any object within the virtual partition can be added to a domain. |
| Logical Interfaces | 8,192 | 8,192 | 8,192 | |

| | | | | |
|----------------------|----------------|----------------|----------------------|-------------------------------------|
| Resource Classes | 100 (99) | 1 | 100 (99) | One is used for the default class. |
| Roles | 4,000 | 16 (8) | 16 (8) per context | Eight are predefined. |
| Sticky Groups | 4,096 | 4,096 | 4,096 | |
| Sticky Table Entries | 4,000,000 | 4,000,000 | 800,000 | |
| Virtual Contexts | 251 | N/A | 21 (1 Admin context) | 250 user contexts + 1 Admin context |
| VLANs | 4,000 (2-4094) | 4,000 (2-4094) | 4,000 (2-4094) | |

Security-Related Limits

Scalability Numbers The scalability numbers provided here are meant to provide guidelines related to configuration scalability. The scalability numbers, however, are based on basic configurations. In order to obtain scalability numbers specific to a particular customer, testing with that customer's feature combination is strongly recommended before any commitment on ACE performance is made to the customer. If there are any questions or concerns related to ACE performance, please contact your Cisco account team for guidance.

| Security Related Object | ACE Module System Limit | ACE Module Context Limit | ACE Appliance Limit | Additional Information |
|------------------------------------|-------------------------|--------------------------|---------------------|------------------------|
| Static NAT Policies | 4096 | 4096 | 4096 | |
| Dynamic NAT Policies | 4096 | 4096 | 4096 | |
| Maximum of addresses in a NAT pool | 64 | 64 | 32 | |
| Maximum of addresses in a PAT pool | 63k | 63k | 631 | |
| PAT Entries | 4,000,000 | 4,000,000 | 1,000,000 | |
| Total NAT Pools | 8,192 | 8,192 | 8,192 | |

| | | | | |
|----------------------|--|--|---|--|
| Xlates | 1,000,000 | 1,000,000 | 64,000 | |
| Concurrent SSL Conns | 100,000 | 100,000 | 100,000 | Subset of L7 (proxied) connections |
| RSA key size | up to 4096 bits | up to 4096 bits | up to 4096 bits | Supported: 512, 786, 1536, 1024, 2048, and 4096 (imported public keys only) bits |
| SSL Certs/Key files | 3800/3800 (A2(3.x) and earlier) 4096/4096 (A4(1.0) and later) | 3800/3800 (A2(3.x) and earlier) 4096/4096 (A4(1.0) and later) | 3800/3800 (A3(1.x) and earlier) 4096/4096 (A3(2.x) and later, incl. A4(1.0)) | This number is strictly enforced in A220, A214, and A322 |

Management-Related Limits

Scalability Numbers The scalability numbers provided here are meant to provide guidelines related to configuration scalability. The scalability numbers, however, are based on basic configurations. In order to obtain scalability numbers specific to a particular customer, testing with that customer's feature combination is strongly recommended before any commitment on ACE performance is made to the customer. If there are any questions or concerns related to ACE performance, please contact your Cisco account team for guidance.

| Management-Related Object | ACE Module System Limit | ACE Module Context Limit | ACE Appliance | Additional Information |
|---------------------------|-------------------------|--------------------------|---------------|---|
| AAA LDAP Servers | 6,144 | 8 (24 total) | 8 | |
| AAA RADIUS Servers | 2K (256*8) | 8 (24 total) | 8 | |
| AAA TACACS+ Servers | 6K (256*24) | 8 (24 total) | 8 | |
| Domains | 2500 | 64 (63) | 64 (63) | One domain is used for the default-domain and cannot be removed |

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| | | | | |
|------------------------------|--------------------|------------------------|-----------------------------------|--|
| Local Users | 7500 | 30 (Admin context: 28) | 31 (including admin, www, and dm) | |
| Objects within a Domain | No limit | No limit | | Any object within the virtual partition can be added to a domain |
| Resource-classes | 252 | Not applicable | 100 | |
| Roles | 4000 | 16 (8) | 16 (8) | Eight are predefined and cannot be altered, leaving eight for you to customize |
| SNMP Hosts | No Limit | 10 | | |
| SSH Sessions | 256 | 4 | 4 | |
| Syslog buffer size | 4 MB | 4 MB | 1 MB | |
| Syslog CP rate | 5,000 per seconds | 5,000 per seconds | 3,000 per seconds | |
| Syslog DP rate | 350,000 per second | 350,000 per second | 100,000 per second | |
| Syslog history table size | 256 x 500 | 500 | | |
| Syslog Hosts | 256 | 2 | 2 | |
| Syslog internal queue size | 10 MB | 10 MB | 8,192 messages | |
| Syslog persistence size | 1M | 1M | | |
| Syslog rate limit table size | 256 x 100 | 100 | 10,000 messages per sec | |
| Telnet Sessions | 256 | 4 | 4 | |