Release Notes - Novell ICS 1.2 - Support Pack 1
March 24, 2000

Table of Contents

1.0   Known Issues

       1.1   ICS Hangs on Restart

              ICS will not restart completely when the following
              conditions exist in combination with each other:

                  -    The eth0 network adapter is connected to the
                       network

                  -    The eth0 network adapter is configured with a

valid IP address or has been reconfigured to use a 10-net address

- No other network adapters have IP addresses set and they are not connected to the network

- Factory settings have been restored from the browser-based management tool or the command line

To get around this problem, do the following:

1) Disconnect eth0 from the network.

2) Manually restart the appliance.

3) After the appliance restarts and you hear the startup beep sequence, reconnect eth0 to the network.

1.2 Netscape Browsers Don't Display ICS PDF Files

The online help home page includes links to PDF files. Netscape browsers display these as ASCII.

All release notes are also available in text format, but the PDF versions of the Administration Guide and the Quick Start cannot be viewed with a Netscape browser.

2.0 Resolved Issues

The following conditions have been addressed in Support Pack 1.

2.1 Read-Ahead Parsing Zero-Length URLs Incorrectly

When this condition occurred, the appliance would restart.

ICS 1.2 SP1 parses zero-length URLs correctly.

2.2 ICS Not Throttling Tunnel Connection Data

In some cases when tunnel connection data (SSL, FTP, POST) was being retrieved by ICS faster than the receiver was accepting the data, the appliance would stop responding to incoming requests.

ICS 1.2 SP1 throttles tunnel connection data, thus stabilizing system performance.

2.3   ICS Not Handling POST Transmissions

In some cases a large POST transmission was being corrupted, causing POST method failure and requiring the user to resubmit the request. ICS performance was not impacted.

ICS 1.2 SP1 does not corrupt POST transmissions.

3.0   New Features and Clarifications

3.1   HTTP Minimum Value

In the browser-based management tool, setting the HTTP Minimum value to 0 in Cache > Tuning > Cache Freshness causes the option to have no effect.

3.2   New Import/Export Options

You can now download configuration files from a floppy disk in the appliance's floppy drive. You can also import a configuration file from any URL to either the appliance or to its floppy drive.

4.0   Command Line and GUI Sluggishness during Startup

Appliances with more than one disk drive execute mirroring and cloning processes when the system starts the first time. These one-time processes are required for ICS system fault tolerance and must run to completion.

While the processes are running, the console and the browser-based management tool might seem sluggish for as long as a couple of minutes.

Cache performance is also somewhat affected by the processes.

IMPORTANT: Do not restart the appliance. This only causes the mirroring and cloning processes to restart and delays the arrival of normal system response times.

5.0   Fine-Tuning Appliance DNS Name Resolution

The ICS_RDME.TXT file in ICS 1.2 indicates that DNS names ending with domain extensions other than .com, .org, and so on, are sometimes resolved in unexpected ways.

You can now customize how ICS resolves DNS names.

5.1   How ICS Resolves DNS Names

When ICS receives a browser request, it creates a DNS query based on the URL in the request and sends the query to one of the DNS Name Servers defined for the appliance.

If the DNS Name Server can't resolve the query, ICS formulates subsequent DNS queries based on the following:

- The appliance's domain name

- The appliance's R_APPEND.CFG file

5.2   How ICS Formulates Subsequent DNS Queries

Assume the following:

- The browser request URL is webserver.

- The appliance's domain name is acme_ics.com.

- The appliance's R_APPEND.CFG file has the following content:

    www.%s.com
    www.%s.edu
    www.%s.org
    www.%s.gov
    www.%s.net
    %s.com
    %s.edu
    %s.org
    %s.gov
    %s.net
    www.%s

If the initial DNS query fails, ICS does the following:

1. It formulates a second query by appending the appliance's domain name to the URL as follows:

```
        webserver.acme_ics.com
```

2. If this query fails, ICS appends the appliance's sub domain name to the URL as follows:

    ```
        webserver.com
    ```

3. If this query fails, ICS appends each entry in the R_APPEND.CFG file in the order listed until one of the following occurs:

    -   The DNS server returns an IP address for the name.

    -   ICS's query options are exhausted and it returns a DNS error to the browser.

    If a DNS name has already been tried, ICS skips the query and moves to the next item in the list.

    Continuing with the example, ICS would submit the following queries, substituting webserver for the %s variable in the lines of the R_APPEND.CFG file.

    ```
      www.webserver.com
      www.webserver.edu
      www.webserver.org
      www.webserver.gov
      www.webserver.net
      webserver.edu
      webserver.org
      webserver.gov
      webserver.net
      www.webserver
    ```

    Since webserver.com was tried previously, ICS skips the sixth line (%s.com) in the R_APPEND.CFG file.

5.3   Modifying the R_APPEND.CFG File

1) Start an FTP client on a workstation with access to the appliance.

2) Point the FTP client to one of the appliance's IP addresses.

3) Enter the following command:

```
get ETC\PROXY\APPLIANCE\CONFIG\USER\R_APPEND.CFG
```

The file is transferred to the FTP client's
default directory.

4)   Referring to the example in the previous
     section, modify the R_APPEND.CFG file using an
     ASCII editor.

     Ensure that the lines in your file reflect the
     query order and content you want ICS to use when
     attempting DNS name resolution. For example, you
     might want to reorder the domains listed or
     include two-letter country codes in the list.

5)   Use the put command to place the modified
     R_APPEND.CFG file back in
     \ETC\PROXY\APPLIANCE\CONFIG\USER on the
     appliance.

6)   Restart the appliance.

6.0   Using WCCP V2

      Cisco recommends that customers use IOS 12.05t or later
      for WCCP v2 to work as planned.

7.0   Enhancements and Changes to Online Documentation

      The following items have been corrected in the online
      documentation where appropriate.

      7.1   Links to Readmes and the Quick Start

            The first page of the online documentation now
            contains links to the ICS 1.2 Quick Start and
            Readmes.

      7.2   ICP Server Listening Port

            The ICS 1.2 online documentation for the ICP/CERN
            Configuration tab incorrectly implied that the ICP
            Server Listening port can have a hexadecimal value.
            ICS port number fields can be assigned only decimal
            values.

            Valid port numbers are 0 through 65,535, not FFFF.

7.3   Managing Log Files

In Using Other ICS Services > Using ICS Logging
Services > Using FTP to Manage Log Files, the
documentation implies that you can determine the
names of log files using FTP. This is incorrect. You
can only retrieve log files via FTP, and this
requires that you know the log filename.

ICS appliance log filenames can be listed in the
browser-based management tool in Monitoring > Cache
Logs. They can also be listed from the command line,
or via a Telnet session.

ICS automatically generates log filenames as
follows:

-    6 numbers representing the year, month, and
     day the file was created

-    A dash separating the date from a letter
     identifier.

-    Letter identifiers running from A through ZZ.

This naming convention accommodates up to 702 log
files per day. If the rollover options are set so
that all the possible file names are used in one
day, the log file with the ZZ letter identifier is
not closed until the start of the next day.

7.4   Filter Service Logs and Common Log Format

The common format used to log filter transactions
must not be confused with the common log format used
for logging caching services. Although some overlap
of fields exists, filter logs require a different
set of information. This has been clarified in the
online documentation.

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