BCM 3.6 Cumulative Patch #3

****

BCM 3.6 Cumulative Patch #3

Date: Dec 14, 2005

Patch: BCM 3.6 Cumulative Patch 3

Applicable Platform: BCM 3.6

System Impact: This 115 mb patch takes approximately 30 minutes to apply and
initiates two reboots.

Description:

This is the third cumulative patch created for BCM 3.6. The purpose of the
Cumulative Patch
is to bring a BCM 3.6 up to the latest s/w as easily as possible by reducing the
amount of
time it takes to install all current patches.
The Patches included in the Cumulative Patch are listed below. These are all
globally
applicable patches. If you are running a private or limited availability patch,
please
consult Nortel Technical Support before applying the Cumulative patch.
The Cumulative Patch will not apply individual component patches if the
component has
already been patched or has a later patch.
All patches are applied if required. There is no ability to individually select
the
components to be patched.
This patch is tested with NCM. NCM time out value should be 3600, please contact
Nortel for
support if any issue is seen with operation time out while installing this patch.

Recommendation: Critical

The Cumulative Patch contains many critical fixes in several software components.
Nortel
Networks recommends it be installed on all new installs of BCM ReleaseID 3.6 and
immediately
after upgrades to BCM 3.6.

Included Patches:

* BCM_360.045 - BCM 3.6 Apache Configuration Update
* BCM_360.075 - BCM 3.6 SRG 36.10.11.51
* BCM_360.079 - BCM 3.6 SDL Driver Debug Patch
* BCM_360.084 - BCM 3.6 Security Update for Microsoft Windows
* BCM_360.090 - BCM 3.6 802.11 set support
* BCM_360.096 - BCM 3.6 CDR Push/Pull Upgrade Fix
* BCM_360.121 - BCM 3.6 Voice CTI 3.6 30.04.1
* BCM_360.131 - BCM 3.6 IVR Patch
* BCM_360.132 - BCM 3.6 QoS version 3.6.0.18

```
* BCM_360.140 - BCM 3.6 UTPS  version 37.170.60.12
* BCM_360.142 - BCM 3.6 Phase II Set FW v. D4B Update
* BCM_360.169 - BCM 3.6 SSM v. 37.2.4c.11
* BCM_360.174 - BCM 3.6 IPView SoftBoard v.2.0.008
* BCM_360.180 - BCM 3.6 Security Update for Microsoft Windows
* BCM_360.183 - BCM 3.6 T.38 Interoperability Patch
* BCM_360.184 - BCM 3.6 Unified Manager Patch
* BCM_360.185 - BCM 3.6 Call Detail Recording Upgrade
* BCM_360.187 - BCM 3.6 IPSecIKE Update
* BCM_360.198 - BCM 3.6 WAN Driver Update
* BCM_360.199 - BCM 3.6 Maintenance Page Update
* BCM_360.203 - BCM 3.6 CTE 3.6 2.20B Update
* BCM_360.206 - BCM 3.6 Alarm Monitor Update
* BCM_360.207 - BCM 3.6 Security Update for Microsoft Windows
* BCM_360.210 - BCM 3.6 FEPS v. 37.150.0.33 Patch
* BCM_360.212 - BCM 3.6 Voice MSC Service and Driver Update
* BCM_360.216 - BCM 3.6 Default FTP-Root Folder Reset
* BCM_360.224 - BCM 3.6 Reporting for Call Center Client 2.1.051
* BCM_360.227 - BCM 3.6 MSC Core wi06.17 Update
* BCM_360.228 - BCM 3.6 Security Update for Microsoft Windows
* BCM_360.229 - BCM 3.6 NRU Update
* BCM_360.232 - BCM 3.6 Voicemail 36.00.78.22 Update


Indivdual Release Notes:

BCM_360.045 - BCM 3.6 Apache Configuration Update
      Applicable Platform: BCM 3.6
      Recommendation: Non-critical
      Component and Version: Apache
      Dependencies: None
      Description:
      1. Replace the httpd.conf with the new one
      2. Re-start the apache service.
      The following issues are addressed:
      1. In UM, the browsing log directory link is broken.

BCM_360.075 - BCM 3.6 SRG 36.10.11.51
      Description: This patch is required to enable an SRG 1.0 system to
interoperate
                 with the S1000 Rls 4.0 Geographic Redundancy feature.
      Applicable Platform: BCM 3.6
      Recommendation: N/A
      Component and Version: SRG 36.10.11.51
      Dependencies: None
      The following issues are addressed:
      * Q00995699: SRG requires TPS Poll timeout to properly work with GR.

BCM_360.079 - BCM 3.6 SDL Driver Debug Patch
      Applicable Platform: BCM 3.6
      Recommendation: Critical (for SDL Debugging)
      Component and Version: DrvDbgDisp.exe
      Description: When attempting to display debug logging for SDL the error
"Page cannot
                 be found" is seen.
      The following issues are addressed:
      * Q00995784: Cannot Debug SDL on 3.6
```

BCM_360.084 - BCM 3.6 Security Update for Microsoft Windows
      Applicable Platform: BCM 3.6
      Recommendation:
      Component & Version: MS04-011
      Dependencies: None
      Description: Security Update for Microsoft Windows (835732)
      This is a cumulative patch addressing several newly-discovered Microsoft
Windows
      vulnerabilities.
      An attacker who successfully exploited the most severe of these
vulnerabilities
      could take
      complete control of an affected system, including installing programs;
viewing,
      changing, or deleting data; or creating new accounts that have full
privileges.
      This patch also contains an update to BCM software in order to establish
      compatibility between the fixes in MS04-011 and existing drivers on BCM
200/400
      platforms.

BCM_360.090 - BCM 3.6 802.11 set support
      Description:
      The patch adds support for 802.11 sets.
      In order to support I2210/I2211 sets in DHCP mode two parameters are added
under
      UM>>Services>>DHCP>>DHCP Global Options. UTPS and UM have been modified to
recognize
      the I2210/I2211 sets
      CRs fixed:
      Q00902671: EMS does not handle IP set details correctly for spectralink
sets
      Software components changed:
      * UTPS.exe
      * iptelephony.dll
      * utils.dll
      * tcpiputils.dll
      * dhcpsubsys.dll
      * webmenu.cfg
      * subsys.cfg
      * mspstrings.dll
      * EMSManager.exe

BCM_360.096 - BCM 3.6 CDR Push/Pull Upgrade Fix
      Applicable Platform: BCM 3.6 GA
      Recommendation: Critical
      Component and Version: CDR
      Dependencies: None
      Description:
      The following issues are addressed:
      * Q00948196 - Fixes the failed CDR Push/Pull functionality after the BCM
3.6 Upgrade
      process.

BCM_360.121 - BCM 3.6 Voice CTI 3.6 30.04.1
      Applicable Platform: BCM 3.6
      Recommendation: Critical

Component and Version: 3.6 - Voice CTI 3.6 30.04.1
Description:
This patch prevents toll bypass as described in the CR Q00943868. It limits the
calls transferred by voice port members (VM Auto-Attendant) to internal extensions
and private trunks.
BCM_360.131 - BCM 3.6 IVR Patch
This patch includes the following IVR updates: mps1.0.1.51, mps1.0.1.52,
globl2.0.1.43, hostp1.0.1.6 and hostp1.0.1.7
Patch ID: mps1.0.1.51
Synopsis:
ANI/DNIS not propogated to the application.
Symptom Description:
Applications are unable to obtain ANI/DNIS.
CRs Resolved:
* Q00950753: Multiple upgrade issues after upgrading BCM from 3.5 to 3.6.
Patch ID: globl2.0.1.43
CRs Resolved:
* Q00734287 IVR application crashes due to memory leak in psched.
* Q00787523 perisvc changes to support multiple service dependecies.
Patch ID: mps1.0.1.52
Synopsis:
BCM upgrades loose some configuration/data files.
Symptom Description:
During upgrades config/data files are lost and causes system to function improperly.
CRs fixed with this patch:
* Q01005093: Upgrade from BCM 3.0 to 3.6 removed vasdblist.
Patch ID: hostp1.0.1.6
Synopsis:
Host Protocols (vpstn3270) fails to get license on startup for BCM IVR.
CRs fixed with this patch:
* Q00787523 - On BCM ivr, Even though valid licenses are available, host protocols fails to get
license and goes to demo mode.
Patch ID: hostp1.0.1.7
Synopsis:
Host Fail Problem on VPSTN3270 on MPS100
CRs fixed with this patch:
* Q00866146 – Bad parameter when attempting to disconnect from the host

BCM_360.132 - BCM 3.6 QoS version 3.6.0.18
Description:
BCM 3.6 QoS 3.6.0.18
Problem
* Bluescreen occurs after installation of BCM 3.6 Patch #1. They occur within
ntoskrnl.exe, but stop after removing patch.
* Need an additional check for the SDL WAN interface.
Solution
* There was a mismatch between the sizes of the buffer passed from Unified Manager
to the mspQoS driver. This resulted in writing to memory that did not belong to the
driver, hence the vagueness of the bluescreen.

* When more than 2 segments are detected for an H.225 message, send a TCP ACK back
up the stack. This fools the sender into sending more segments of the message. We
also fixed the timeout mechanism for old H.225 held buffer entries.
BCM 3.6 QoS 3.6.0.12 to 3.6.0.16
Problem
* Note: NAT rules should be applied to the ISDN interface that is taking over when
the WAN connection fails when SNMP management to a specific IP address is needed.
* If H.225 packets are segmented into three or more packets, the call will not go
through.
* BCM DHCP Relay does not relay DHCP Offer from Win2k server to Win98 client.
* During an H.323 vulnerability test suite, an issue was found with mspqos.sys which
caused a bluescreen. MspQoS event message 4045 appears in log.
* When Allow Access Network is set to NO, BCM does not block IP traffic coming over
ISDN link and going to machines connected to BCM LAN/WAN.
* SIP Client connecting through a BCM to an MCS5100 does not work. This was caused
by incorrectly modifying part of the UDP packet.
* During file transfer through the Firewall, eventually the transfer would stop.
This was caused by the TCP window value being adjusted and then the amount of data
in the packet would go over the new window size.
* The mspQoS driver crashed in one of the SIP parser routines when the one of the
fields in a SIP packet passing through the BCM was zero.
* SIP packets passing through the BCM are causing large numbers of event log
messages to be generated. This was caused by not understanding certain SIP messages
that passed through the BCM.
* Needed to be able to manage SNMP on the BCM using a specified interface IP
address. This is because the system will assign the IP address of the interface
where the packet will be sent out of. In certain instances behind firewalls, it is
desirable to set this to use only one of the interface addresses.
Solution
* Special flag was added to NAT rules when ISDN connection came up.
* Replaced request for user class info in DHCP discover/request message with IP
default Time to Live.
* The bluescreen was caused by not validating a pointer.
* Buffer used for segmented signaling messages wasn't big enough. Increased the
size of the buffer.
* Added code for dropping IP traffic arriving on ISDN link and going out of LAN/WAN
interface when Allow Network Access is set to NO.

* The driver no longer incorrectly modifies the SIP UDP packet.
        * The window values stored in the Firewall state are now the maximum
values
        negotiated over the entire TCP session.
        * Code has been added which checks to see if the field in the SIP packet
is null.
        * Added a check for unknown but valid SIP messages.
        * Modified NAT to be able to put the IP address of any of the interfaces
in the
        Public field and the IP address of this NAT interface in the Private field.
        CRs Resolved:
        * BCM 3.6 QoS 3.6.0.18
        o Q00972313: BCM Blue screens
        o Q00705861: Three Segment Problem
        * BCM 3.6 QoS 3.6.0.12 to 3.6.0.16
        o Q00999404: NAT is not working with ISDN backup connection
        o Q00979221: SRG not passing DHCP to Win98
        o Q00982228: Newer H.323 PROTOS test suite causes QoS to fail and BCM
restart
        o Q00997606: H225 Messaging error on SRG
        o Q00967319: Allow Network Access Feature
        o Q00889038: MCS5100 softphone does not work in B2B from BCM 3.6
        o Q00728493: BCM - Firewall Rule Problem
        o Q00897115: Blue screen when SIP traffic from MCP Client to MCS5100 is
routed
        through the BCM
        o Q00900551: mspQoS SIP error logged in NT Event Log for every SIP message
passing
        through BCM
        o Q00834761: Need to be able to manage BCM from specified IP address
        Software components changed:
        * mspQoS.sys

BCM_360.140 - BCM 3.6 UTPS version 37.170.60.12
        CRs Resolved:
        * Q01025626 - lowered transmit by 3db for phase 2 sets to reduce echo
        * No associated CR - increased f/w download time-out to 2.5 minutes to
allow for
        terminals that are slow to reconnect.

BCM_360.142 - BCM 3.6 Phase II Set FW v. D4B Update
        CRs Resolved:
        * Q00944566 Fix on DHCP/VLAN
        * Q01024821 Speakerphone/Handsfree is unusable on IP Set
        Other Changes:
        Miscellaneous new selftest from wistron to include flash lock sector test
        Miscellaneous RUDP fix possible packet drop when the packet arrives out of
order

BCM_360.169 - BCM 3.6 SSM v. 37.2.4c.11
        CR Resolved:
        * Q01088216 - The chassis fan led may turn red and incorrectly indicate
that the fan has failed.

BCM_360.174 - BCM 3.6 IPView SoftBoard v.2.0.008
The following issues are addressed:
        * BCM 3.6 IPView SoftBoard v.2.0.008

o Q01088786: RCC 2.1.047 / Whenever QT is greater than 1000, digits which are zero are not always displayed correctly, i.e. 1089 is displayed as 1,89, and 3001 is displayed as 3,1.
        * BCM 3.6 IPView SoftBoard v.2.0.007
        o Q00880351-01: IPview:Need the ability to choose what network card it uses - sw fix.
        * In the Echoing tab the user can now choose the IP Address to use a drop down menu.
        Help About dialog box shows the IP Address that ipView is listening on. (Before it
        used to show the first one it found.)

BCM_360.180 - BCM 3.6 Security Update for Microsoft Windows
        This BCM patch addresses the vulnerability described in Microsoft Security Bulletin
        MS05-019, Vulnerabilities in TCP/IP Could Allow Remote Code Execution and Denial of
        Service (Article 893066). An attacker who successfully exploited the most severe of
        these vulnerabilities could take control of an affected system or cause the affected
        system to stop responding. There is no workaround that addresses all the
        vulnerabilities.

BCM_360.183 - BCM 3.6 T.38 Interoperability Patch
        A number of T.38 issues have been resolved in this release, as described below:
        A. Initial fax protocol negotiation failure due to the timing of T38 task creation:
        (Post BCM 3.6)
        Problem Description:
        If the T38 Task does not receive the entire first burst of fax negotiations from the
        answering fax machine, then a CRP (Command Repeat) signal was sent to the
        originating fax, causing some fax machines to hang-up.
        Solution:
        If no other V21 signaling has been sent to the originating/answering fax machine,
        then T38 will not send a CRP, but instead just end the signal and await another
        burst of negotiation.
        Also, the T.38 task will ignore incoming packets until the appropriate "Preamble"
        packet
        is received to indicate the proper start of a negotiation burst.
        B. Answering Fax does not respond to first EOP (End of Page) message: (Post BCM 3.6)
        Problem Description:
        If an answering fax does not reply to the first EOP (End of Procedure) message, the
        T.38 Task could enter a state in which no further fax communications could take
        place in the T.38 session.
        Without confirming the EOP, the fax machines would indicate a transmission failure.
        Solution:

During EOP reception, the T.38 task will no longer enter a state where it will block
further fax signaling.

C. Transmit speed is not acquired by T.38 Task (Post BCM 3.7 Beta)

Problem Description:

Some fax machines send very short DCS messages to indicate the transmit speed that
the transmitting fax is about to send. Due to a race condition within the T.38 Task,
this speed was not received properly and would cause the fax session to fail. In
this scenario, ALL fax transmission attempts from that specific fax machine (over
T.38) would FAIL. (This is a fairly rare situation).

Solution:

The transmit speed will be acquired by the T.38 Task earlier in the process to avoid
the race condition.

D. V.34 to V.34 fax attempts over T.38 are frequently failing (Post BCM 3.7 Beta)

Problem Description:

V.34 to V.34 fax machines use a different negotiation protocol than is supported by
T.38. Upon failing to negotiate at the faster speeds, these fax machines should back
off to V.21 negotiations.

Some fax machines would back off to V.21 properly, but then recognize the V.34
capabilities of each other and attempt V.34 negotiations once again. This causes
frequent failure of fax transmission of these types of calls over T.38.

Solution:

There is a V.8 bit in the V.21 negotiations that indicated if the answering fax
machine supports the faster speeds. Masking out this bit prevents the fax machines
from trying to renegotiate V.34.

E. Misinterpreted Voice Call initiates T.38 Task (Post BCM 3.7 Beta)

Problem Description:

If a CED (fax answer tone) is heard in a VoIP call (fax/modem overheard in the
background, a switch to T.38 will be initiated. If fax signaling is detected while
in T.38 mode (modem/fax speaker audible in the background), then the T.38 Task could
receive bad data. This could cause the T.38 Task to get into a non-recoverable state.

Solution:

Specific fax identifiers will be checked for in the T.38 Task to ensure that a fax
call is taking place.

F. UDP Redundancy Control support added to DSP Firmware (Post BCM 3.7 Beta)

Problem Description:

The UDP redundancy was previously hard-coded to 2 in the DSP Firmware.

Solution:

The UDP Redundancy setting in Unified Manager is sent to the T.38 Task, and this

value will now be used to control the T.38 redundancy transmitter (maximum of 2
frames).
G. UDP Redundancy in high-speed data causing multi-page faxes to fail.
Problem Description:
UDP Redundancy is used during high-speed data transmision (page data) from some
gateways was causing BCM's T38 to stop transferring any T38 data causing the fax
over T38 connection to fail.
Solution:
As this was never tested for, once the problem was known and reproduced, the BCM
firmware was fixed to allow the larger packets (due to redundancy during high-speed
data) to be accepted from the network.
CRs Resolved:
* Q00831314: BCM; Upgrade to 3.5, faxing stopped working
* Q01057041: BCM VMail not working & "No Resource" seen when Voicemail accessed
* Q00901572: BCM <-> BCM H.323 T.38 calls are failing over NAT
* Q01105648: BCM - Long T.38 fax calls BCM to PSTN fail

BCM_360.184 - BCM 3.6 Unified Manager Patch
Applicable Platform: BCM 3.6
Recommendation: Critical
Component and Version: BCM3.6 GA
Dependencies: None
The following issues are addressed:
* Q00907581 - BCM 3.5 does not show all the remote gateways programmed. (Only 25 of
them)
* Q00881489 - "Incremental Payload Size" control is missing in unified manager
* Q00944339 - LAN1 and 2 goes down after restarting the router with patch
* Q00944340 - LED's keep on Blinking after applying patch
* Q00956906 - ISDN Link doesn't establish after applying the patch
* Q00935053 - BCM crashes when multiple connections on same Callback user
* Q00934446 - RAS Callback not working correctly
* Q01103195 - G729 Payload displayed as 0ms after CP2 applied

BCM_360.185 - BCM 3.6 Call Detail Recording Upgrade
The patch upgrades the Call Detail Recording service on BCM 3.6
CRs Resolved:
* Q01085046 - When using account codes, if someone inputs an account code during a call, then all other current calls get that same account code.
* Q01085230 - CDR records may show more than one account code per call.
* Q01079061 - When two agents, simultaneously enter an Activity Code following Feature 900, the agent's SET who entered the Activity Code last, gets locked up.

BCM_360.187 - BCM 3.6 IPSecIKE Update
Problem Description
1. If there are multiple IPSec tunnels from one interface and the remote side of
one of the IPSec tunnels stops responding, IPSecIKE restarts the interface which

brings down all of the IPSec tunnels on this interface.
Solution Description
1. IPSecIKE service should not restart the interface, it should simply delete the
IPSec tunnel that's remote side is not responding.
List of CRs Resolved
* Q01112914: BCM 3.6 WAN circuit disc. IPsec , VPN session resets.
* Previous fixes
o Q00970868: BCM does not send Initial Contact Payload prior to creating a new BOT.
o Q01076334: Contivity 5.x VPN client not Supported on BCM
Software components changed
There is 1 file included in this change
* IPSecIKE.exe 3.6.0.6
Applicable BCM releases and affected profiles
* BCM 3.6, All Profiles

BCM_360.198 - BCM 3.6 WAN Driver Update
Patch Description:
The purpose of this patch is to update the current WAN Driver present on BCM 3.6
systems.
CR's Resolved:
* Q01090459: BCM 3.6:WAN Recovery
Previously Resolved:
* Q00888200: IP routing slows down over time, reboot restores

BCM_360.199 - BCM 3.6 Maintenance Page Update
Patch: Weekly Scheduled Restart not working
Applicable Platform: BCM 3.6
Recommendation: Non-critical
Component and Version: Voice Platform - MaintBody.php
Dependencies: None
Description: Fixes the issue with weekly scheduled restart. Please refer to
Q01142938: BCM400v3.6

BCM_360.203 - BCM 3.6 CTE 3.6 2.20B Update
Patch: CTE patch to properly report on DNIS and CLID for auto call information
Applicable Platform: BCM 3.6
Recommendation: Non-Critical
Component and Version: CTE 3.6 2.20B
Dependencies: This is a cumulative patch containing all previous CTE and TSP changes
Description: Proper reporting on DNIS and CLID for auto call information
The following issues are addressed:
1. Q01001775 - DNIS changes
2. Q01032381 - lineMakeCall race condition fixed
In patch 2.10 :
Enhancement: Added new Cte Application that runs as a service on the BCM (Hunt Group Metrics Reporter) that collects HG metrics and places the output in the CDR datafile directory.

BCM_360.206 - BCM 3.6 Alarm Monitor Update

This patch updates the Voice Software Alarm Monitor so that Core Telephony logevent
135 is reported in the NT Event Application Log.

BCM_360.207 - BCM 3.6 Security Update for Microsoft Windows
This BCM patch addresses the vulnerability described in Microsoft Security Bulletin
MS05-027, Vulnerability in Server Message Block Could Allow Remote Code Execution (KB
article 896422). A remote code execution vulnerability exists in Server Message Block
(SMB) that could allow an attacker who successfully exploited this vulnerability to
take complete control of the affected system. A workaround to not enable any drive
shares.

BCM_360.210 - BCM 3.6 FEPS v. 37.150.0.33 Patch
CRs Resolved:
* Q01095627, VoIP Call Drop when a switch from Primary to Backup GateKeeper occurs
Description: Upon taking the primary gatekeeper out of service (OOS) via the CS1K
gatekeeper element manager, the gatekeeper would send the VoIP Gateway an
UnregisterRequest which would trigger the VoIP Gateway into dropping all active
calls.
Resolution: Upon getting an UnregisterRequest from a gatekeeper, only drop all
active calls if in GatekeeperRouted mode. If using GatekeeperResolved mode, all
active calls should not be affected.
* Q01011670, SN07Plus: H323 GK to GK T38 interop: Bcm t38 fax calls fail.
Problem: The SN07 GW upon determining that it wished to switch from a voice to
T.38 call, would dynamically update its TerminalCapabilitySet (TCS) to include T.38
(original TCS did not include T.38), and resend this to the BCM, immediately
followed by a RequestMode(T.38). The receipt of an updated TCS by the VoIP Gateway
would trigger it into a RecvdNewCaps state in which it expected to
exchangeMasterSlaveDetermination messages with the other H323 endpoint, and would
reject the RequestMode while in this state. Hence the T.38 fax call would fail.
Resolution: Instead of rejecting, to buffer RequestMode(T.38) messages while the
VoIP Gateway is in a RecvdNewCaps state, until MasterSlaveDetermination exchange
had completed, and the VoIP Gateway is again ready to handle the RequestMode.
* Q01121345, VoIP trunk lock up on incorrect release scenario.
Problem: Depending on call scenario, FEPS expects two release messages and only one is sent . Causes a VoIP trunk to lock up waiting for a final release message.

Resolution: State machine changes made to FEPS. Corresponding changes
were also made in the Core.

BCM_360.212 - BCM 3.6 Voice MSC Service and Driver Update
        The following CRs are resolved:
        * Q01139597 - BCM 400 3.6 Voicemail not accessible
        * Q01160314 - BCM System Crash when power is dropped from 110v to 90v

BCM_360.216 - BCM 3.6 Default FTP-Root Folder Reset
        Applicable Platform: BCM 3.6
        Recommendation: Non-critical
        Component and Version: none
        Dependencies: None
        Description:
        The following issues are addressed:
        * Q01095645 - Default FTP Root folder stays at E:\ after upgrade/patch
which affects
        NCM,CDR.(Default FTP root folder should be E:\ftproot)

BCM_360.224 - BCM 3.6 Reporting for Call Center Client 2.1.051
        Patch: RCC 2.1.051
        Applicable Platform: BCM 3.6
        Recommendation: CC/VM Build VM_36_00_61_22 or higher MUST be used with
this patch
        (and any RCC builds greater than 2.1.042).
        Component and Version: Version 2.1.051
        Dependencies: This patch requires CC/VM Build VM_36_00_61_22 or higher.
        NOTE: For existing installations:
        1. In Add/Remove Programs uninstall Reporting for Call Center.
        2. DO NOT uninstall Java or MySQL.
        3. Run the Reporting for Call Center install.
        CRs Resolved:
        * BCM 3.6 Reporting for Call Center Client 2.1.051
        o Q01125326-01 BCM 3.6 RCC Script time out for certain reports
        o Q01145323-01 BCM 3.6 RCC Daily Scheduled Reportd Inaccuracies
        o Q01122383 TGS: RCC hammers the BCM if it gets invalid XML
        o Q01116576-01 CP 150 RCC Print reports not working properly a4 issue
        o Q01152160 RCC Build 50: Unable to run a Answered Call report for more
than one
        month
        o Q01171722 BCM 3.6 Can't open several bi-monthly reports for large
database
        * BCM 3.6 Reporting for Call Center Client 2.1. 039 to 2.1.050
        o Q01078407 RCC: need to accommodate for change in RealTime xml Schema to
get the
        OD from CC
        o Q01087274 MMCC: No happy face for text chat in RT (RCC Fix)
        o Q01076535 BCM 3.6: RCC Session Disconnects
        o Q01077923-01 RCC Installer still runs after old RCC is still installed
        o Q01077534 RCC: IP Wallboards lose Connectivity overnight
        o Q01058244 Field Performance: Georgetown, ON - BCM 3.6 - RCC wallboard
errors
        o Q01043008 TGS: Help file translations do not correspond to the menu
options items
        o Q01092601 Outgoing calls and VM calls not showing proper status in RCC
        o Q01085154 BCM 3.6: Call Profile report doesn't show the skillset name
        o Q01079021 wallboard displays 0 AI despite agents are on calls

o Q01088786 RCC 2.1.047 / Whenever QT is greater than 1000, digits which
are zero are not always displayed correctly, i.e. 1089 is displayed as 1,89, and
3001 is displayed as 3,1.
    o Q01073510 TGS: Schedule Weekly Reports Not Printing
    o Q01075053 TGS: Install of Build 46 gives ActiveX error for
PrintSchedules in log
    files
    o Q01028950 BCM 400/3.6 IPView Clients are not receiving any data
    o Q01045977 TGS: Spelling error for Country Name in main Menu
    o Q01041866 TGS: Print Schedules will not save a report titled with an
apostrophe
    o Q01036662-01 MMCC: BCM - RCC shows incorrect info for MMCC calls
    o Q01045488-01 TGS: Schedule daily report printed for wrong day selected
    o Q00873144 /36BETA/RCC Build 28 German reports, incomplete headlines
    o Q01033000-01 BCM 3.6 Report: Call Abandoned reports mismatch
    o Q01046189 outgoing calls daily (OD) parameter on wallboard
    o Q00959173 Wallboard buzzer went off for no reason.
    o Q00999700-02 TGS: New reports missing translation (BCM 3.6/3.7/CP 3.0)
    o Q01012651-04 BCM 3.6 RCC Build 42 not pegging abandoned call when
skillset calls
    are transfer
    o Q00873144 36BETA/RCC Build 28 German reports, incomplete headlines
    o Q00873144 RCC New translations for missing help text and logging pages
    o Q00791457-02: TGS:MSDETime Bins - modify totals row
    o Q00996377: BCM 3.6 RCC problems
    o Q00959173: WALLBOARD BUZZER WENT OFF FOR NO REASON.
    o Q00929393: TGS:Internal Security Problem
    o Q00929393-01: TGS:Internal Security Problem - Skillset Assignment
    o Q00929393-02: TGS:Internal Security Problem - Various Exploits
    o Q00858971: TGS: RT Summary window only gives Call Summary button
    o Q00928677: Print Caller shows as "Not Responding" in Task Manager
    o Q00935653: TGS: Call Average Report is incorrect for Total Average Time
to Abandon
    o Q00935689: TGS: Unable to display the Call Profile Report for build 40
    o Q00935689-01: TGS: Unable to print Scheduled Call Profile Report for
build 40
    o Q00927660: TGS: Remove comma at the end of skillset list in report
    o Q00894622: TGS:Error Page displays incorrect info for Wallboard name
with
    apostrophe
    o Q00864109: TGS: Held Call ABDN peg does not appear in 2 of the 3
activity code
    reports
    o Q00873244: TGS: You can delete a message even if it's assigned to an
alarm or
    schedule.
    o Q00894552: TGS: Every 20 secs Connect status real time changes from
green to red
    then back
    o Q00908407: BCM 3.6 Beta- RCC CRASHED
    o Q00910087: TGS: Incorrect error msg when using invalid character at
login
    o Q00934672: TGS: Cannot delete a message that is not assigned to an alarm
or a
    schedule
    o Q00927786: TGS: RT Agent Detail - Status is Null

o Q00937504: TGS: Average time to answer in the Summary Report is
incorrect
o Q00937510: TGS: Average time to Abandon in the Summary Report is
incorrect
o Q00960082: TGS: Adding 1 sec to request from time can cause it to be
>than end
time
o Q00952361: TGS:Realtime multi SS agent F905 error
o Q00762353: TGS: Crystal Reports : Multiple reports from same Crystal
Reports
window
o Q00769601: TGS: Report mouseovers should be removed
o Q00958039-01: BCM3.6, RCC Build 41 - Wallboard incorrectly shows calls
in queue -
RCC
o Q00897110: TGS: Install Shield : Repair option fails and causes RCC to
break
o Q00935689: TGS: Unable to display the Call Profile Report for build 40
o Q00935689-01: TGS: Unable to print Scheduled Call Profile Report for
build 40
o Q00946866: TGS: Agts logged into multi skillsets do not show up in all
ss for agt
Reports
o Q00900072: TGS: Agent Audit Report does not display the Agent logout
time
o Q00897110: TGS: Install Shield : Repair option fails and causes RCC to
break
o Q00911888: TGS: Wallboard driver - high CPU usage
o Q00914371: BCM 3.6 2.2b RCC 38 Server is running almost 98% CPU usage
due to
IPView wallboa
o Q00872840-01: CC: Monitoring time resets to zero when pressing JOIN or
Mute or
OBSV (F905)
o Q00872840-02: TGS: Monitor Time reset to zero if super accepts help
request
o Q00886993-01: TGS: Skillset names on report headers instead of SS Id on
all
scheduled reports
o Q00889608: TGS: RT: State time counters for multiple calls are
inaccurate
o Q00891308: After Connection to BCM RCC Web Host went to 100% CPU
o Q00892615: TGS: Connection status did not turn red when IIS service was
shut down
o Q00897565: TGS: GoS Defaults to 0% in RT Summary Report, & RT Call
Detail
o Q00897569: TGS: Skillset names run off the end of the page for
historical reports
o Q00898166: Realtime summary not showing supervised calls
o Q00903446: BCM 3.6 Beta - Agents in multi-skillsets does not alarm
o Q00874253-01: RCC Proxy Server - SUOG Troubleshooting Tips
o Q00856888-01: TGS: GoS formula changed, requires an update to
documentation
o Q00904711: TGS: Request for more shadowing for the grayed out parameter
description
o Q00900705: TGS: Agent selection field for Agent Audit Report is
improperly labeled

o Q00864576: TGS: SS names are being cutoff in the Schedule Print Reports
o Q00864599: TGS: Agent Audit Report data is not centered under the headings
o Q00879608: TGS: Scheduled Act Code Reports Not show system pegs
o Q00885127: TGS: Time bin column labels are not lining up in Ans and Abd reports
o Q00889631: TGS: Reporting for Call Center - Download Status window acts strangely
o Q00895528: TGS: Scheduled reports only list current Agents and Pegs
o Q00894375: TGS: Large data requests cause historical reports to generate errors
o Q00898710: TGS: print schedule unanswered help request
o Q00898710-01: TGS: print schedule help request report error
o Q00871513-02: TGS: Change Agent Capacity Report title from Total to Grouping
     Schedule Reports
o Q00899754: TGS: Always Eng if a user accesses RCC via
     http://[webhost]/rcc/main/login.asp
o Q00904695: TGS: Six parameters for S/W WB should not displayed when Title selected
o Q00911887: TGS: printcaller using high memory
o Q00915152: BCM 3.6 Beta- Wrong pop-up window in Skillset Activity Code report
o Q00902591: Users group is not valid in German version (RCC does not install on
     non-English OS)
o Q00899040: Wallboard Driver consuming memory

BCM_360.227 - BCM 3.6 MSC Core wi06.17 Update
     Patch Description:
     The purpose of this patch is to apply a new core image to the BCM 3.6 system.
     This release was built on August 10, 2005.
     CR Resolved:
     * MSC Core wi06.17
     * Q00971020 No sequence checking for unrecognized IEs
     * Q01087165 Update UI-Frame handling
     * Q01121305 Allow receipt of STATUS msg after 911 call to 5ESS switch
     * Q01179729 Loss of Forceauto/spd dial over ic/conf functionality
     * Q01101726 Fix for Q01101726 (Cannot call out on idle channel)
     * Q01165773 Add MCDN Progress Indicator to the CONNECT message
     * Q01026566 Update PRI Makefile to allow creation of D64 files
     * Q00971043 Missing Channel ID in RESTART message exception handler
     * Q00884059 Support for logging Logevent 310 when sending or receiving STATUS
     * Q01033464 Ignore unrecognized IEs in sequence checking
     * Q01121305 Allow receipt of STATUS msg after 911 call to 5ESS switch
     * MSC Core wi06.00 to wi06.16
     * Q01155829 Link Transfer drops when Supervised
     * Q01106980 BCM rebooting
     * Q01028145 Unable to send digits from slave when master puts Conference on
     * Q01150579 Voice Path Lost When Held Conference Created
     * Q01142073 BCM3.6 400 VoIP trunks dropping
     * Q00992293 BCM fails to provide appropriate call treatment during busy/vaca
     * Q01113767 BCM 1000, 3.6: Call Logs not showing Ca

* Increase DS30_TX_UQUEUE QUEUE_SIZE to 60
* Includes the new busy tone library
* DTMF and FSK CLID fix for Taiwan
* Q01010005 Taiwan Busy tone detection.
* F4839 Poland MP port to BCM 3.6
* Q01103606 BCM 400 3.5 Randomly Rebooting
* Q01113443 BCM 3.6 Huntgroup overflow rings solid switch to DTD servers,
old syntax.
* Q01121305 Add support for AT&T Call Queued cause value on BRI trunks
* Q10394937 To resolve the expiration of T310 issue
* Q01121305 Add support for AT&T Call Queued cause value on PRI trunks
* Q01111855 Creating tones file for Spain
* Q01126447 UK GATM driver: Need to change RZ bit to support Algo dongle
* Q01122824 Telset Doesn't Display the Prefix 0 of the CLID.
* Q01107778: Needs upgrade from BCM3.0 to BCM3.6 for T7316E sets
* Q00992293: BCM fails to provide appropriate call treatment during
busy/vacan
* Q01087386: BCM36 speakerphone and handset active
* Q00970904: DPNSS call cut-off's
* No Number ConferIII CR Fix and 1KHz tone CR fix
* Q01024914: IP Page Delay Feature Enhancement Q01024914
* Hunt group DN's not ringing
* Q01018341: BCM Crosstalk on IP Phones
* Q00869882: Transfer to External Autodialer Drops Call
* Q01045609: Transfer to External Autodialer Drops Call
* Q00992293: BCM fails to provide appropriate call treatment during
busy/vaca
* Q01036100: Originate Privacy doesn't properly send Release FUMP under
Rejec
* Q01048696: Move Line Fails When Swapping Line or HG keys on CAP or KIM
* Q01036111: Fump Translator Fix
* Q00931160: One way speech path between 2 ISDN terminals connected via a
T1
* block nvram id's for IP page delay feature 0000000000
* Q01035344: Hidden Calls should not be allowed to be put on auto-hold.
* Q00931157: Modify T1 EAM state machine for JTIC T1 EAM link disconnect
test
* Q01035765: core resets during silent monitor session
* Q01005820: MWI (lamp)status lost once BCM is Powered On/Off
* Q01028145: Unable to send digits from slave when master puts Conference
on
* Q00923512: PRI202 message appears before notify message is sent by BCM
* Q01035344: Hidden Calls should not be allowed to be put on auto-hold
* Q00974036 - Poland Market option cannot be selected from UM
* Q00832363 - Silent Monitor : Call Does not release from Supervisor set
after
* Q00987479 - M50: "Copy in Use" lockup
* Q00971830 - BCM 3.6 hunt group overflow
* Q00864456 - calls dropping on Timer Recovery
* Q00957346 - Pause duration in Poland MP is too short
* Q00880226 - PRI209 message is printed out each time a call is answered
by
* Q00901554 - Porting - DAI does not allow for clearing the Hunt Group
Metri
* Q00925630: UK CLID does not work in ASM8+
* Q00968360: Pulse dialing of Digit 1 has a conflict with Link (Flash) in
Poland

market
        * Q00898869: Three way Conference introduces static and degraded voice
quality for
        CALA load
        * Q00964733: False polarity reversal detection for the incoming calls.
        * Q00964720: Release handshake is not happening properly. Event 263
        * Q00895534: ASM8+ not supported in double density mode
        * Q00975071: CLID and DS needs to be disabled in BCM 3.6.1 release in
ASM8+
        Australia profile
        * Q00933352: One way speech path on externally forwarded I/C calls
        * Q00929748: BRI issue: fallback to Prime CFWD to External Call is
dropped/rejected
        * Q00908910: BCM 3.5: Multiple customers: Programmed values change wh
        * Q00908629: Q00908629 Load test: release trunk driver on path failure
        * Q00934039: Cross talk issue
        * Q00919551: Range Indexing Errors in Hunt Group Code
        * Q00906477: BCM3.01/Hunt Group pick-up 0 calling/Phone Lockup/ Set tin/
[also
        Q00881236 (P3/CSR)]
        * Q00863025: Incoming DPNSS Embark calls fail
        * Q00910620: Populate the Redirecting Number with the pub/priv digits
        * Q00901481: No speech path after TRO in PRI to Voip tandem.
        * Q00864395: Reset due to corruption of Timer Call Retention Timer
        * Q00862133: Network Callback Timer Field missing in the UM in UK Profile
        * Q00901714: Remove check for cause in tandem of PROGRESS message (Also
Q00823209
        [P3/AT])
        * Q00910620: Allow the Redirecting Number to be sent to FEPS
        CORE Version Codes:
        * MSC Core wi06.17 (Build date: August 10, 2005)
        o 30DcG17 - EE-ETQ-3.6 (T1)
        o 30DdG17 - EE-ETQ-3.6 (E1-Europe)
        o 30DeG17 - EE-ETQ-3.6 (E1-Global)
        o 30DaG17 - EE-CT2P-3.6 (T1)
        o 30DbG17 - EE-ETQ-3.6 (E1-CALA)

BCM_360.228 - BCM 3.6 Security Update for Microsoft Windows
        This BCM patch addresses the vulnerability described in Microsoft Security
Bulletin
        MS05-039 "Vulnerability in Plug and Play Could Allow Remote Code Execution
and
        Elevation of Privilege (KB Article 899588)" and MS05-040 "Vulnerability in
Telephony
        Service Could Allow Remote Code Execution (KB Article 893756)". Either one
of these
        vulnerabilities could allow an attacker, who successfully exploited one or
both of
        these vulnerabilities, to take complete control of the affected system. An
attacker
        could then install programs; view, change, or delete data; or create new
accounts
        with full user rights.

BCM_360.229 - BCM 3.6 NRU Update
        This patch fixes a problem where Telephony OAM may become unavailable
(without cause)

and does not recover. It affects the Telephony sections of Unified Manager,
the
        Telephony option in the BRU Utility, and the daily scheduled NCM import.
        CR Resolved: Q01135414

BCM_360.232 - BCM 3.6 Voicemail 36.00.78.22 Update
        **WARNING: You must ensure that the RCC client is not polling the BCM at
the time
        you apply this patch. If you are applying an RCC patch as well, first
uninstall the
        RCC Client from the Web Host PC, apply the patches to the BCM, then
install the new
        RCC Client. If you are not applying an RCC patch, you must either stop the
RCC
        Launcher Service on the Web Host PC or shut down the Web Host PC before
applying
        the VM patch to the BCM.
        The following issues are addressed:
        * Q01105802- BCM - Multiple fax pages sent to internal fax machine.
        Plus all fixes in previous 3.6 core patches: List of patches
        VM_36_00_77_22
        * Q01084491-01 - Upg: Agt are prompted for ACs when upgrading from BCM 3.5
        * Q01150521-01 - RCC:Get latest Call Center data displays 'Cannot
establish
        connection to CC'
        * Q01152492-01 - Server error in xml for one browser only call
        * Q01158768-01 - Final peg need to be done when agent presses RLS key to
release
        call and F907
        36.00.64.22 to VM_36_00_76_22
        * Q01084491-01 - Upgrade: Agents are prompted for ACs when upgrading from
BCM 3.5
        * Q01143802-01 - CCMIS: Voice portion of Phone and browser call not shown
in RCC
        * Q01149449 - BCM 3.6 - RCC incorrect Agent Detail Real time
        * Q01085985-02 Call does not appear in XML when agent logs out during the
call.
        * Q01095211 MMCC: Idle time duplicated for an Agent resulting in invalid
Available
        time stats in Agent Profile report.
        * Q01095541 Voice Mail Hang Error seen on reboot: Event logger 7022 -
Service
        Control Manager- "Voice Mail hung on Startup"
        * Q01108587 MMCC Transferred call shown in Realtime but not in reports
        * Q01111545-01 Voicemail message "Cannot continue" and "Exit" for all
users
        * Q01112179 Call Center Connection Download stalls at 1% and never
continues nor
        does it error out.
        * Q01116354 XML parsing error because of Invalid Characters in the XML
CLID field
        * Q01105802 Multiple fax pages sent to internal fax machine
        * Q00873473 - TGS: realtime agent log out then in stats
        * Q01085273 - BCM400 IPview, reports incorrect
        * Q01075322-01 - One button Park and Page enhancement
        * Q01074053 - ccmis: XML Schema missing definitions
        * Q01025319 - RCC | Get Unknown Server Error viewing realtime stats

```
     * Q01046564 - CC: Errors in XML
     * Q01047077 - BCM 3.6 RCC Agent Audit Report incorrect
     * Q01064493-04 - ccmis: update xml schema to make DNInfo node a non-
required item
     * Q01064493 - ccmis: update xml schema to make DNInfo node a non-required
item
     * Q01065124 - TGS: upgrade to 1.1.30 causes HST to fail
     * Q01022327-03 - CP Outdial - Dialing Translation Table issue where
dialable #'s
     cannot be used
     * Q01024497 - Skillsets that have a forced greeting are preventing other
skillsets
     from distributing
     * Q01012651-01 - BCM 3.6 RCC Build 42 not pegging abandoned call when
skillset
     calls are transfer
     * Q00877810-03 - Express Msg / FAX
     * Q00887800-01 - Call Center Transfer to AA Routing not working as
expected
     * Q00893014 - BCM 3.6 RCC Build 28 stopped displaying Real Time Data
     * Q00906146 - TGS;No display of answ'd CC calls on RT Call Summary and
Call Detail
     * Q00572075 - Request for Beep verses a Ringback tone given for forced
answer calls
     in CC (beep tone shortened from 4 seconds to 2 seconds for UK profile).
     * Q00903663 - TGS: F70 Transfer to VM dn reason shows incorrectly in RCC.
     * Q00952740-01 CC:Upgrade from CC Basic to CC Prof when RCC key code
applied fails
     * Q00872840-04 CC: Agt Avail timer not reset to zero if gone into
supervisor state
     * Q00893014 West Virginia Tax: BCM 3.6 RCC Build 28 stopped displaying
Real Time
     Data
     * Q00903663 TGS: F70 Transfer to VM dn reason shows incorrectly in RCC.
     * Q00906146 TGS;No display of answ'd CC calls on RT Call Summary and Call
Detail
     * Q00960780 RCC Build 41 Shows AGENTS STUCK ON OUTGOING CALLS
     * Q00963636-01 CPL CCRS: supervision ends too soon
     * Q00968198 BCM 3.6: Call Center Agent not prompted for Activity Code in 1
scenario
     * Q00902175-02 - CC: Don't blow away Call Center Reporting Server Database
with
     future patches
     * Q00970662-02 - Support for Military A digit
     * Q00981895-02 TGS: Calls are not being routed in the Call Center (with
RCC Build
     2.1.042 or higher)
     * Q00944660-01 - Wrap time inconsistent with Call Transaction end time
     * Q00980179 - TGS: No calls being shown in reports for F70, CF
     * Q00993143-01 - When VPIM re-replying to a voice message the message
doesn't go
     through.
     * Q01006070 - CCRS: DB upgrade required


*******************************************************************************
*************
```

Note: To print this information, copy the information displayed to Notepad.

Note: Some patches require the automated reboot of the BCM. If the patch require rebooting
the BCM the patch should be applied during non-business hours or during scheduled system
downtime.

BEFORE BEGINNING

Please close any open Unified Manager or Putty sessions.

The update will not be performed until certain information has been verified about the existing
status of the BCM. This will include confirming the BCM software release, the available disk
space, the MSC card and MS-PECs, and information from telephony services.
This information may be confirmed in advance without modifying the existing state of the BCM.

THE UPDATE

The BCM 3.6 Update may be performed as a One-Step Update or as a Two-Step Update.

One-Step Update

This method performs the Update in one step - once started, the update will continue until
completion.
Use this method by selecting both "Transfer Update Files to BCM" and "Apply Update to BCM"
from the options page after the BCM Patch Wizard has confirmed that the BCM is ready for the
BCM 3.6 Update.

The BCM may or may not be operational once the "Transfer Update Files to BCM" activity is complete and
the "Apply Update to BCM" activity has started. Depending on the complexity, the Patch wizard may
be programmed to perform automatic system reboots and service shutdowns. You can verify above if there
are system reboots required.
Do not attempt to stop or interrupt the update once it has started - this will leave the BCM in
an unusable state.

Two-Step Update

This method performs the BCM 3.6 Update in two steps.
The steps may be completed one directly after the other or with the second step completed days
after the first.

Use this method by selecting "Transfer Update Files to BCM" from the options page after the
BCM Patch Wizard has confirmed that the BCM is ready for the BCM 3.6 Update.

The BCM will remain operational and unchanged throughout this activity.

When prepared to update the BCM, select "Apply Update to BCM" from the options page. Since
it has already been performed, the "Transfer Update Files to BCM" activity will not be available.
Depending on the complexity, the Patch wizard may be programmed to perform automatic system
reboots and service shutdowns. You can verify above if there are system reboots required.
The BCM may or may not be operational once the "Apply Update to BCM" activity has started.
Do not attempt to stop or interrupt the update once it has started – this will leave the BCM in
an unusable state.

Performing the Two-Step Update allows for more accurate scheduling of the timeframe when the
BCM will not be operational.