

DTS-PVS

v1.5

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#### Revision History

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# Introduction

## Document Objective

To provide CGI support groups with the required information to understand, operate and recover the system in the production environment.

## Document Overview

This document is intended for the CGI personnel who are responsible for the correct operation of the on-line system and consists of eight sections that cover the following topics:

**System Overview** – Short description of the environment (hardware, software, network, etc.) required to run the system.

**Production Schedules** – Description of the production sequences and their scheduling.

**Application Recovery Procedures** – Instructions on how to recover following an application or sub-system failure.

**Disaster Recovery Procedures** – Instructions on how to recover the entire system or subsystem at an alternate site or on different hardware environment following a disaster or major hardware failure.

**Support Model** – Identification of key support contacts for main System Support functions.

**Problem Identification and Resolution** – Description of call flow and how to handle various errors generated by the system.

**Monitoring/Support Tools** – Description of monitoring/support tools or processes.

**Change Management** – Description of processes and responsibilities to introduce fixes or enhancements to the system.

In addition, the appendices contain further information on specific topics.

## Document Custodian Group

Changes to this document are coordinated and controlled by the CGI MAS PVS-PCI team to ensure consistent information is provided to all support teams. Requests for changes to this document must be raised to the contact below and can be identified by CGI support teams or any of Bell's teams or external vendors involved in the support model as detailed within this document.

The below contact will receive all requests for changes and after assessment (with involvement from CGI Service Management as required) will ensure the document is updated and distributed to all teams involved within the support model as detailed within this document. The owner is also the central and single point of contact for providing the latest version of this document.

|  |  |
| --- | --- |
| Current Owner | Contact Info |
| CGI MAS DTS-PVS | See section 6.2 [CGI MAS DTS-PVS](#_CGI_MAS_DTS-PVS) |

# System Overview

## System Description

As part of its ongoing efforts to proactively protect customer account data and mitigate the risk of security breaches and sensitive data compromise/ loss, Bell Canada seeks to comply with the Payment Card Industry – Data Security Standard (PCI DSS), a multifaceted security standard that includes requirements for security management, policies, procedures, network architecture, software design and other critical protective measures for any business that stores, processes or transmits payment cardholder data.

To support the implementation of PCI DSS standards, Bell has developed a data tokenization system (DTS), a service-oriented architecture which enables integrating applications to tokenize or de-tokenize a customer’s Primary Account Number (PAN) to ensure safe handling of cardholder information. In this context, tokenization refers to the process by which a Primary Account Number, such as a customer's credit card number, is represented by a random, non-sensitive piece of data (i.e. a "token"), which can be used by various Bell Support Systems (BSS) to reference the PAN stored in a separate and secure Cardholder Data Environment (CDE). All existing and new BSS applications which process cardholder information are expected to integrate with DTS.

In order to comply with PCI DSS, a new stand-alone instance of the OMF Payment Validation Service (hereinafter referred to as DTS-PVS), residing in the CDE De-Militarized Zone (CDE DMZ), has been developed to support all existing OMF PVS functionality, in addition to new service capabilities that include de-tokenization of credit card PANs via integration with an exposed DTS-RTS web service. The DTS-PVS service is expected to co-exist with the current OMF PVS service, until such time that the OMF PVS service is fully decommissioned from the OMF framework and existing service consumers are transitioned to the new DTS-PVS service.

Key functionality includes:

* A new DTS-PVS service (i.e. a new instance of the OMF Payment Validation Service) which supports both existing OMF PVS capabilities and the de-tokenization of credit card PANs via DTS-RTS integration for two operations:

1. ***Payment Validation*** - Operation supporting banking information validation via PRISM, credit card address validation via Equifax, and credit card authorization (i.e. hold funds) via PayPal.
2. ***Credit Card (CC) Charge and Refund*** – Operation supporting credit card charge and refund transactions via PayPal.

See Appendix A Payment Service Primary Operations for more details

* DTS-PVS service in the CDE-DMZ environment, supporting:
  + Weblogic Application Server
  + DTS-PVS has a certificate-based authentication with DTS-RTS
  + File-based logging based on the existing OMF Payment Validation service logging framework

**Note:** DTS-PVS was previously known as PVS-PCI and PVS.

## Client Community

There are no direct end users of DTS-PVS, however interfacing client applications make use of the de-tokenization services and interfacing credit and payment service providers.

### Impact If PVS-PCI Not Available

|  |  |  |
| --- | --- | --- |
| **Client Application** | **Users** | **Impact** |
| ODS | No direct end users; orders via OrderMax | Orders kicked out |
| OrderMax | Used by Bell TV, Bell Home Phone, Bell Internet, and Call Centre, and retail store agents | Kickouts in DigiTek system |
| SIMPLe | Call Centre agents process Internet products orders | Cannot proceed with most orders |
| VAS-POS | Used by external users to place internet orders | Cannot submit orders |
| Vucare | Used by Bell TV external users to make changes to existing program | Cannot submit orders |

## Interfaces

### Client (BSS) Applications

|  |  |  |
| --- | --- | --- |
| **Client Application** | **Interface** | **Time Out Value** |
| Bell.ca Shop |  |  |
| Credit Express | Web service (SOAP/HTTPS) | 60 seconds |
| DART | Web service (SOAP/HTTPS) | 60 seconds |
| ODS | Web service (SOAP/HTTPS) | 60 seconds |
| OrderMax | Web service (SOAP/HTTPS) | 65 seconds |
| SIMPLe | Web service (SOAP/HTTPS) | 90 seconds |
| VAS-POS | Web service (SOAP/HTTPS) | 120 seconds |
| Vucare | Web service (SOAP/HTTPS) | 120 seconds |
| WAC | Web service (SOAP/HTTPS) | N/A\* |

Note: \* WAC does not have a set timeout for this Web Service call as it was developed a couple

of years ago

### Tokenization/De-Tokenization

|  |  |  |
| --- | --- | --- |
| **Client Application** | **Interface** | **Time Out Value** |
| DTS-RTS | Web service (SOAP/HTTPS) | 10 seconds |

### Interfacing Credit and Payment Service Providers

|  |  |
| --- | --- |
| **Interfacing Application** | **Interface** |
| Equifax | Web service (SOAP/HTTPS) |
| PayPal | Web service (SOAP/HTTPS) |
| Prism | Web service (SOAP/HTTPS) |

## 

## Environment

### Architecture Diagrams

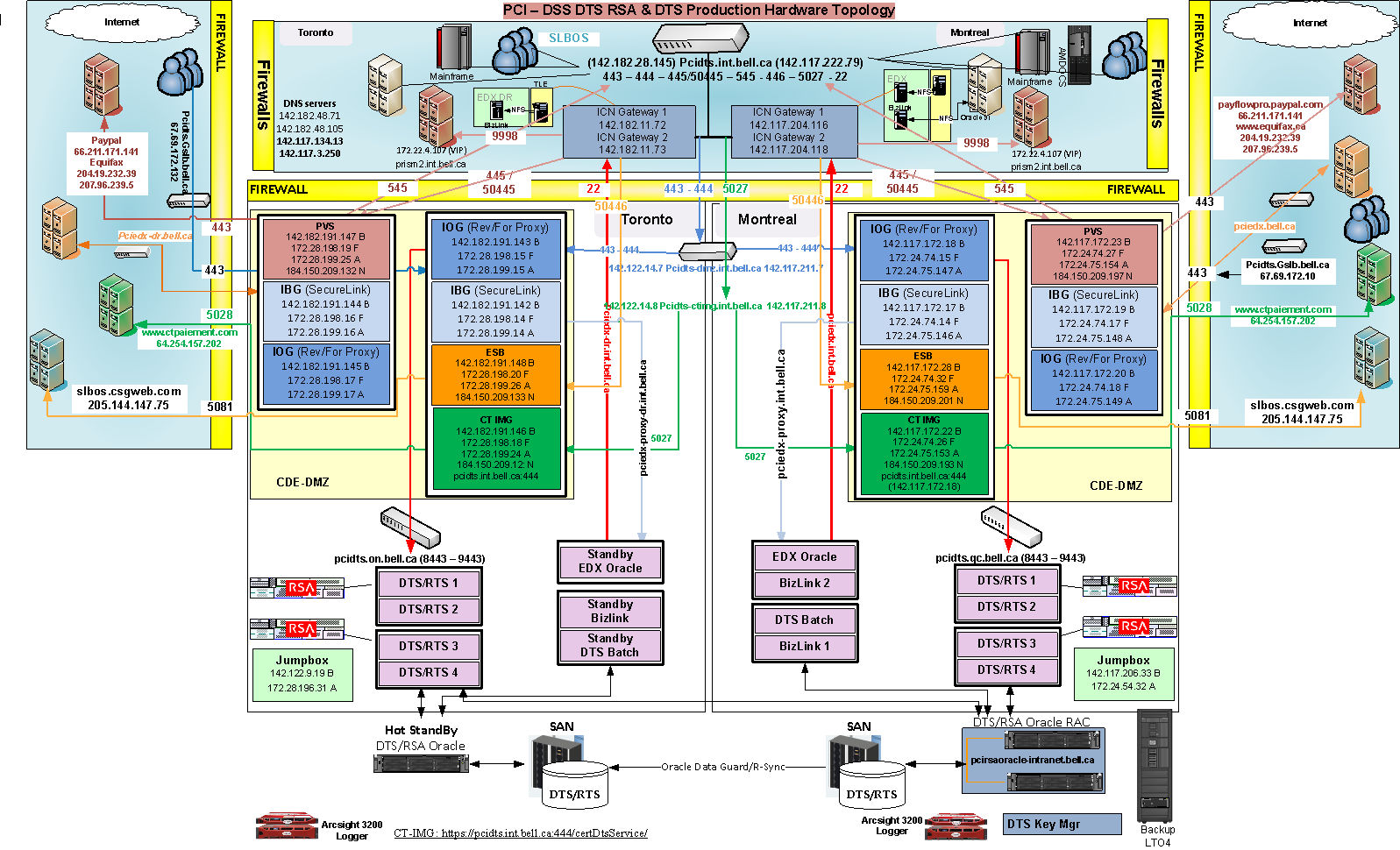
### DTS-PVS



***Source:*** *DTS-PS – Payment Validation Operation v0.5.doc*

### DTS Production

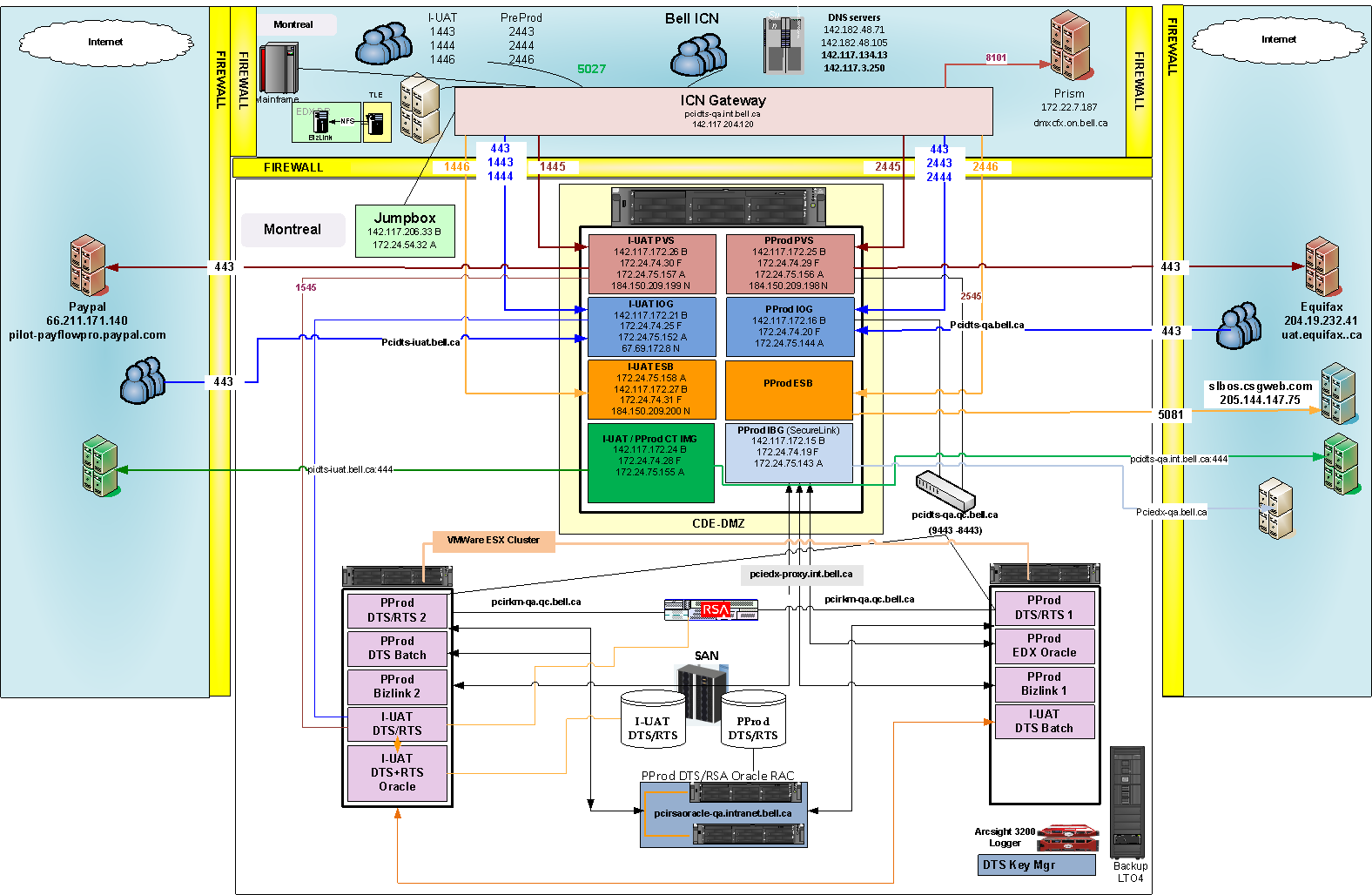
The following diagram describes the production environment. For more details and additional diagrams, refer to the *PCI-DTS\_System Architecture Specification\_DTS\_v3.0* document, from which the diagram below has been extracted, and the *DTS System Environment Specification v1.2* document.



Only the servers labeled PVS are part of the DTS-PVS application.

### PCI Pre-Prod (CDE)

The following diagram describes the production environment. For more details, refer to the *DTS System Environment Specification v1.2* document.



### Load Balancing

DTS-PVS makes use of the DTS-PCI load balancing environment. Refer to the PCI DTS Environment Specification (stored in Ensemble) for a general description of the load balancing components and redirection capabilities.

There is no load balancing between DTS-PVS and DTS-RTS, but manual failover can be used.

### Server Config



Further server details are available in this spreadsheet:



DTS-PVS servers are highlighted in green

NI-Guardian Servers:



### PCI Hardening

**PCI hardening** for CDE servers includes:

* Visual Check / manual config – Each operating system has a significant number of manual verifications and configurations to be made in order to make them PCI compliant.  These are specified in the appropriate “checklist” document.
* ArcSight OS – Each system is configured to forward its operating system logs to ArcSight
* ArcSight – Application Logs – Each system is configured to ensure the application logs can be forwarded to the ArcSight consol
* File Integrity Monitor - Each system is configured with McAfee File Integrity Monitor
* Policy Auditor - Each system is configured with McAfee Policy Auditor
* ePO -- Each system is configured with McAfee ePO
* Virus Scan - - Each system is configured with McAfee Virus Scan
* HIPS - - Each system is configured with McAfee HIPS (Host Intrusion Prevention System)
* Patchlink - - Each system is configured with Lumension’s LEMMS patch distribution (Formerly Patchlink)
* Policy Auditor Run – McAfee Policy Auditor is run against each device to be hardened.
* Policy Auditor results mitigated – If there are any issues identified on the Policy Auditor run which are not PCI compliant they are either mitigated, or an exemption is sought from the client.
* Checklist Appendix D Completed – Appendix D of the appropriate checklist is completed along with a copy of the mitigated Policy Auditor report is stored with the build book to prove that the system has been hardened successfully.

### PatchLink

Patch Management System (PatchLink) is a system that manages critical operation system server security updates.

The DTS-PVS servers are classified as **Class 2, Group 4 for Linux**, so the PatchLink window is Wednesday 22:00 to Thursday 06:00. PatchLink does not reboot the servers.

Refer to the DTS-RTS production guide, section 2.3.6 DTS-RTS Linux Servers for the process to be followed for PatchLink updates.

### DTS PVS Patching Procedure

When there is a patch which needs IBM involvement, a request needs to be sent to IBM Front Door team and IBM Infrastructure team. They will do an assessment considering the work that needs to be done and the sanity tests to be performed. Application can also be rebuilt if needed.

Contact details in the section 6.2.32

### Middleware Patching Process

Refer to the build book.

For the roles and responsibilities, refer to DTS-RTS prod guide section 2.3.11 Middleware Patching Process

### McAfee

Refer to DTS-RTS prod guide, section 2.3.9 McAfee

### ArcSight

Refer to DTS-RTS prod guide, section 2.3.10 ArcSight

### ILO with Remote Console Access to Servers

Connecting to ILO and then remote console into server is not permitted for the DMZ servers (Console not opening). The ILO is only for rebooting physical server.

Access to DMZ ILO from CDE servers is NOT allowed, only via Nexus and restricted to rebooting functionality.

## Security Measures

* DTS-PVS resides in the CDE DMZ.
* Oneway SSL from BSS application to DTS-PVS
* BSS authentication is hardcoded in the BSS request sent to DTS-PVS.
* Certificate authentication via SSL certificates in the CDE DMZ for communication between:
* BSS and DTS-PVS (inbound certificates)
* DTS-PVS and DTS-RTS (for de-tokenization). Advantage Entrust certificate also required.
* DTS-PVS and PayPal (outbound certificate)
* Equifax – DTS-PVS source IP addresses must be known to the Equifax firewall

For additional measures, see DTS-RTS prod guide section 2.4

# Production Schedules

## Daily Operations

### Start of Day Operations

*This section provides the operators with the required procedures to start-up the system (online and batch). These steps include all setup required to maintain a secure and efficient system in operation (e.g. data backup, database reorganization). These operations have already been grouped into autonomous Production Sequences.*

n/a

### Intra-Day Operations

*This section describes the operations initiated during the day at the same time as the on-line system is running. Those operations have already been grouped into autonomous Production Sequences.*

n/a

### End of Day Operations

*This section provides the operators with the required procedures to shut down the system (online and batch). These steps include different operations required to maintain a secure and efficient system in operation (e.g. data backup, database reorganization). These operations have already been grouped into autonomous Production Sequences.*

n/a

### Overnight Operations

*This section describes the operations to initiate jobs running at night.*

n/a

## Periodic Operations

*This section contains the scheduled operations that have different frequencies.*

### Yearly Operations

Certificates are renewed on a yearly basis

For certificate expiry info, refer to the package maintained by CGI MAS DTS-RTS and reviewed weekly with the Bell Application Owner.

## Non-periodic Operations

### Ad Hoc Operations

*This section provides information on how to initiate ad-hoc/on-demand operations (e.g. statistical reports).*

n/a

## Operations Backup

* Only the Dorval servers are backed up. The Wynford servers are considered as extra capacity and failover. The Wynford servers can be rebuilt with adjacent servers or brand new builds.
* The servers in the CDE DMZ are backed up by tarring/zipping all relevant folders and transferring to the jumpbox, under special backup folders that indicate the hostname and date, and all these folders are part of the backup of the jumpbox. Thus, no Netbackup agent or policy exists for servers in the CDE DMZ.
* The RKM appliances for non-prod in Dorval were also setup with tarring the files to the jumpbox.

**Backup Schedule**

1. There is a script on each VM that copies data to the jump server. >>>>  schedule is daily at 3:00 EST, full backup
2. Data is backed from jump server to tape through netbackup.  >>>> details in the doc below



## Critical Dates

Peak periods are the July move and September back to school; beginning of month; end of month; and first day of the work week.

# Application Recovery Procedures

*This section provides information on how to recover following an application or sub-system failure. The failing application is restarted in the original environment.*

Some information is available in the DTS-PVS build book. Further information is being sought by MAS from IBM.

## Server Start/Stop Procedures

Scripts to start and stop Servers.

**Note: Please change the Domain name accordingly to the location and Server**

Admin Server Start/Stop

Start

Browse to the location /opt/pvs01/weblogic103/user\_projects/domains/prodqc/startAdmin\_nohup.sh

Start the application ./startAdmin\_nohup.sh

Stop the application from Admin Console

Managed Server Start/Stop 🡺 “Start /Stop the application from Admin Console only”

Node Manager Start/Stop

Start

Browse to the location /opt/pvs01/weblogic103/wlserver\_10.3/server/bin

Start the Node Manager ./ startNodeManager\_nohup.sh

Stop

Browse to the location /opt/pvs01/weblogic103/wlserver\_10.3/server/bin

Stop the Node Manager ./ stopNodeManager.sh

**After stopping the application we have to delete the below mentioned 2 files one for AdminServer and other for Managed Server and then we have start the application. Otherwise we both the servers will not start.**

/opt/pvs01/weblogic103/user\_projects/domains/prodqc/servers/Server1/data/store/default/

\_WLS\_SERVER1000000.DAT

/opt/pvs01/weblogic103/user\_projects/domains/prodqc/servers/AdminServer/data/store/default

\_WLS\_ADMINSERVER000000.DAT

Important Log paths.

Admin Server Log path 🡺 “/opt/pvs01/weblogic103/user\_projects/domains/prodqc/servers/AdminServer/logs”

Managed Server Log path 🡺 “/opt/pvs01/weblogic103/user\_projects/domains/prodqc/servers/Server1/logs”

Node Manager Log path 🡺 “/opt/pvs01/weblogic103/wlserver\_10.3/server/bin”

## DTS-PVS Sanity Test

**SANITY CHECK AND LOG PATHS FOR DTS-PVS**

**DTS-PVS Server Details:**

**Pre-Production Servers**

Pre-Prod-DTS OnlinePVS 142.117.172.25 DC4CH6-D06 - BackChannel

172.24.74.29 DC4CH8-D06 - Frontchannel

172.24.75.156 DC4CH7-D06 - AdminIP

**Production Servers**

Dorval Prod-DTS OnlinePVS 142.117.172.23 DC4CG0-D06 - BackChannel

172.24.74.27 DC4CG3-D06 - Frontchannel

172.24.75.154 DC4CG1-D06 – AdminIP

Wynford Prod-DTS OnlinePVS 142.182.191.147 DM5CE3-D06 - BackChannel

172.28.198.19 DM5CE6-D06 - Frontchannel

172.28.199.25 DM5CE4-D06 - AdminIP

Follow the steps for DTS-PVS sanity with Payloads. This is the only test that we have done so far to confirm the application is running fine on DTS-PVS.

**Production Payload sanity check for DTS-PVS**

First we need to download and install the software called Vordel Soapbox software which is used to test instead of the normal SoupUI.

Use the corresponding Payload provided for pre-prod and Prod Equifax/Paypal & Prism respectively and the URL to be used in “<https://pcidts.int.bell.ca:445/DTSWeb/PaymentService>”



Paste the payload in Soupbox Request tab and click the Send button and tail the trace\_Server1.log under the location (/opt/pvs01/log/) in OMF-PVS server and confirm that we get DTS000 in the logs for the request send. Please note that for Prism we don’t go through DTS so we may not find the DTS000 for Prism.





From the DTS-RTS side we can check the IOG2 in rpPciDtsAudit.log under the location (/opt/tomcat/logs) and confirm that we see the transaction from DTS-PVS has passing through without any errors.

**Pre-Production Payload sanity check for DTS-PVS**

Use the corresponding Payload provided for pre-prod and Prod Equifax/Paypal & Prism respectively and the URL to be used in “<https://pcidts-qa.int.bell.ca:2445/DTSWeb/PaymentService>”



Paste the payload in Soupbox Request tab and click the Send button and tail the trace\_Server1.log under the location (/opt/pvs01/log/) in OMF-PVS server and confirm that we get DTS000 in the logs for the request send. Please note that for prism we don’t go through DTS so we may not find the DTS000 for Prism.





From DTS-RTS side we can check the IOG2 in rpPciDtsAudit.log under the location (/opt/tomcat/logs) and confirm that we see the transaction from DTS-PVS has passing through without any errors.

Xml data attached.



# Disaster Recovery Procedures

There are no documented DRP for DTS-PVS.

# Support Model

## Support Scope

### CGI Tier 2 Service Level Classification

|  |  |
| --- | --- |
| **Portfolio Name:** | Enterprise Infrastructure and Operations |
| **Service Level Category** | Gold |
| **Application Criticality** | n/a |

Further details on the CGI Tier 2 Service Classification (including the coverage and response time) can be obtained at <http://webhost02.on.bell.ca/SLM/slaonweb/NewSupportInfo.asp>

If there is any discrepancy between the information included in this document and the information from the link, the information from the link will prevail.

### In Scope

* Helpdesk services
* Incident Management support
* Tier 2 MAS DTS-PVS Support
* Standard Linux server support

### Out of Scope

* DTS-PVS application code support (provided by IBM)
* ICN/network support
* Interfacing application support
* Service provider support
* Creation and management of Bell’s contracts with other companies and Bell internal

## Support Groups

CGI Support

1. CGI Customer Service Desk (CSD)
2. CGI 3B Helpdesk
3. CGI IMC (BC / BM / BDI / BTV) Service Recovery Specialists (SRS)
4. CGI MAS DTS-PVS
5. CGI MAS DTS-RTS
6. CGI Linux Support Team
7. CGI Backup & Restore
8. CGI PatchLink Support
9. CGI DSO Security (McAfee)
10. CGI GMSS – ArcSight Support
11. CGI Monitoring, Performance, and Capacity (MPC)
12. CGI Service Management (SM)

Bell Canada and their Vendors

1. Bell Application Owner
2. Bell Billing Services Management
3. Bell Corporate Emergency Management
4. Bell Data Network Services & Support (DNSS)
5. Bell Corporate Security C&M
6. Bell NIDS and WAF Team
7. IBM
8. Oracle – Weblogic Support
9. Red Hat

Interfacing Client (BSS) Applications

1. Bell.ca Shop
2. Credit Express
3. DART
4. ODS
5. OrderMax
6. SIMPLe
7. CGI MAS – VAS-POS
8. Vucare
9. WAC

Credit and Payment Service Providers

1. Equifax
2. PayPal
3. Prism

### CGI Customer Service Desk (CSD) – Service Restoration Analyst (SRA)

The CGI Help Desk (CSD) is the single point of contact for Bell Canada employees. The Service Recovery Analyst (SRA) will be providing first line support for the Bell Canada clients.

**SRA responsibilities are:**

* Provide bilingual support in French and English through a toll free number and a local Montreal number.
* Answer calls based on predefined Service Level Agreement (SLA).
* Open an ITSM ticket for every new incident reported.
* Assess, troubleshoot and document the incident.
* Incidents that cannot be resolved directly by the Help Desk will be assigned to the appropriate Support Team (internal or external).
* Assign a priority level based on contractual agreement with Bell Canada.
* Follow up, update and close the ITSM ticket based on client’s confirmation.
* Engage the Service Recovery Specialists (SRS) for Critical and High Priority ITSM tickets.

**ITSM Support group assignment:**

CGI Support to BC -> User Service Desk -> Service Restoration L1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Role | Name | Hours of Operation | Phone | Cellular |
| SRA TEAM | N/A | Based on SLA | 514-523-5523 in Montreal area  888-920-8888 otherwise | N/A |
| Manager | Erica Villani | 8 AM - 5 PM Mon-Fri | 514.878.8451 | 514.604.8689 |



### CGI 3B Helpdesk – Service Restoration Analyst (SRA)

The CGI 3B Help Desk (BM / BDI / BELL TV) is the single point of contact for BM / BDI / BELL TV employees. The Service Recovery Analyst (SRA) will be providing first line support for the BM / BDI / BELL TV clients.

**SRA responsibilities are:**

* Provide bilingual support in French and English through a toll free number and a local Montreal number.
* Answer calls based on predefined Service Level Agreement (SLA).
* Open a ticket in ITSM for every new incident reported.
* Assess, troubleshoot and document the incident.
* Incidents that cannot be resolved directly by the Help Desk will be assigned to the appropriate Support Team (internal or external).
* Assign a priority level based on contractual agreement with Bell Mobility / BDI / BELL TV.
* Engage the Service Recovery Specialists (SRS) for Critical and High Priority ITSM tickets.

**ITSM Support group assignment:**

CGI Support to BM/BDI/BTV -> User Service Desk -> Service Restoration L1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Role | Name | Hours of Operation | Phone | Cellular |
| SRA TEAM | N/A | Based on SLA | 514-523-5523 in Montreal area  888-920-8888 otherwise | N/A |
| Manager | Erica Villani | 8 AM - 5 PM Mon-Fri | 514.878.8451 | 514.604.8689 |



### CGI IMC (BC / BM / BDI / BTV) – Service Recovery Specialist (SRS)

CGI’s Service Recovery Specialists (SRS) is responsible for monitoring and coordinating the resolution of all Critical and High Priority ITSM tickets.

**SRS responsibilities are:**

* Manage Critical and High Priority incidents to resolution for **not Minted incidents.**
* Coordinate incidents that require multiple support teams (internal or external) within the scope of the Bell ICN and BC / BM / BDI / BELL TV’s respective support teams.
* Follow up with support teams and escalate if need be.
* Initiate Problem Management process for reoccurring incidents if needed.
* Escalate the tickets that are passed the agreed SLA.
* Owner of all Critical and High Priority incidents **not Minted**.
* Initiate Major Incident Manager Process in case of Critical and High Priority incidents for **Minted applications** (Refer to Service Management website for Platinum list).

**ITSM Support group assignment:**

CGI Support to BM/BDI/BTV/BC -> Incident Management -> Service Restoration Coordination

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Role | Name |  | Hours of Operation | Pager/Cellular |
| SRS | N/A | BCCS (BCCS/E-SERVICE/BIMS/BILLING) | 8 AM - 5 PM EST Mon-Fri\* | [9620231899@nma.vodafone.in](mailto:9620231899@nma.vodafone.in) [9620231899@mobileemail.vodafone.in](mailto:9620231899@mobileemail.vodafone.in) |
| Escalation | N/A |  | 8 AM - 5 PM EST Mon-Fri\* | 1-877-320-6958, x8014039 |
| Manager | Bobby Pais |  | 8 AM - 5 PM EST Mon-Fri\* | 011-91-9620231901 |

\* CGI SRS is available via pager outside of these hours.



### CGI MAS DTS-PVS

* Investigating and troubleshooting DTS-PVS incidents.
* Engage CGI CSD for load balancer incident
* Working in cooperation with and engaging the other support teams to analyze, troubleshoot, and resolve incidents.
* Managing implementation of defect resolution.
* Sanity testing, if required, after any application/server/environmental updates.
* Provide input to auditors to be covered by Base-Flex funding
* Manage certificate covered by Base-Flex funding
* Creation of RFC, when required.
* CGI MAS Manager to engage Bell Corporate Emergency Team for any Security incidents
* Assign account creation and modification to THE MONTREAL MAS TEAM
* Install middleware & application builds on DTS-PVS servers`
* Follow dual control password Instructions:
  + Contact Bell OTSS Application Owner to start synchronization process
  + Refer to the DTS-PCI production guide section 2.4.2 Dual Control Password- Protecting Encryption Key Storage, for complete instructions
  + Response time for dual control password completion is within 3.0 hours.
* Respond to and resolve application alerts

**ITSM Support group assignment:**

* CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> DTS SUP

The contacts for the CGI IGDC MAS DTS-PVS team are:

| Role | Name | Phone | Pager/Cell/Email |
| --- | --- | --- | --- |
| DTS-PVS Support (IGDC) | N/A | Helpdesk | [9742268534@mobileemail.vodafone.in](mailto:9742268534@mobileemail.vodafone.in)  [DTS.PCI.INFRASUPP.ban.india@cgi.com](mailto:DTS.PCI.INFRASUPP.ban.india@cgi.com)  [DTS.PCI.APPSUPP.ban.india@cgi.com](mailto:DTS.PCI.APPSUPP.ban.india@cgi.com) |
| Team Leader (IGDC) | Pramod Kumar S | +1-866-354-9295 x8011826 | 011-91-988-674-8824  [Pramod.Kumar.S@cgi.com](mailto:Pramod.Kumar.S@cgi.com) |
| Manager  (IGDC) | Joe Koshy | +1-866-354-9295 x8011625 | 011-91-988-621-2891  [Joe.Koshy@cgi.com](mailto:Joe.Koshy@cgi.com) |

The contacts for the CGI onshore MAS DTS-PVS team are:

| Role | Name | Phone | Pager/Cell/Email |
| --- | --- | --- | --- |
| Manager (MAS) | Ghislain Pepin | 514-415-3068 | 514-216-9210  [ghislain.pepin@cgi.com](mailto:ghislain.pepin@cgi.com) |
| Director (MAS) | Ganesh Rajamani | 905-762-2878 | Cell: 416-434-1691  [ganesh.rajamani@cgi.com](mailto:ganesh.rajamani@cgi.com) |

### CGI MAS DTS-RTS

**ITSM Support group assignment:**

* CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> DTS SUP

The contacts for the CGI IGDC MAS DTS-RTS Team are:

| Role | Name | Phone | Pager/Cell/Email |
| --- | --- | --- | --- |
| DTS-RTS Support (IGDC) | N/A | Helpdesk | [8095598229@mobileemail.vodafone.in](mailto:8095598229@mobileemail.vodafone.in)  [DTS.PCI.APPSUPP.ban.india@cgi.com](mailto:DTS.PCI.APPSUPP.ban.india@cgi.com" \o "mailto:DTS.PCI.APPSUPP.ban.india@cgi.com)  [DTS.PCI.INFRASUPP.ban.india@cgi.com](mailto:DTS.PCI.INFRASUPP.ban.india@cgi.com" \o "mailto:DTS.PCI.INFRASUPP.ban.india@cgi.com) |
| Team Leader (IGDC) | Kurian Mathew | +1-866-354-9295 x8011783 | 011-91-988-079-4795  [kurian.mathew@cgi.com](mailto:kurian.mathew@cgi.com) |
| Application Delivery Manager (IGDC) | Prafull Agrawal | +1-866-354-9295 x8011744 | 011-91-991-604-8411  [prafull.agrawal@cgi.com](mailto:pramod.kumar.s@cgi.com) |
| Manager  (IGDC) | Pramod Kumar S | +1-866-354-9295 x8011826 | 011-91-988-674-8824  **[pramod.kumar.s@cgi.com](mailto:pramod.kumar.s@cgi.com)** |



The contacts for the CGI onshore MAS DTS-RTS Team are:

| Role | Name | Phone | Pager/Cell/Email |
| --- | --- | --- | --- |
| Manager (MAS) | Ghislain Pepin | 514-415-3068 | 514-216-9210  [ghislain.pepin@cgi.com](mailto:ghislain.pepin@cgi.com) |
| Director (MAS) | Ganesh Rajamani | 905-762-2878 | Cell: 416-434-1691  [ganesh.rajamani@cgi.com](mailto:ganesh.rajamani@cgi.com) |

### CGI Server – Linux Support Team

* Investigate and troubleshoot any Linux related incident involving a CGI supported device
* All T1 and T2 support call will be handle by IGDC team
* IGDC support group will engage the Stayback Team if necessary
  + - Support of Unix OS and Hardware
* OS Troubleshooting
* OS Patching
* OS Networking
* Network File System
* IPTables
* Managing user login
* Verification of the exclude lists and filesystems as per weekly system validation check

Onsite Operations:

* Physical support of master server
* Onsite audit requirements
* Respond to Compuware Vantage Server alerts issued to:OCC Tivoli Event Console

**ITSM Support group assignment:**

* CGI Support to BC/BM/BDI/BTV -> Server Management -> Unix

The contacts within CGI IGDC OCC UNIX team are:

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Phone | Pager |
| Primary | [IGDC\_T1\_Hwy\_Unix.BAN.INDIA@cgi.com](mailto:IGDC_T1_Hwy_Unix.BAN.INDIA@cgi.com) | 1-866-354-9295  x8012434 (OCC)  1-703-267-5601 | See ITSM |
| Team Lead | Tahseen Raza | +18663549295 #8011725 | +91 9980130280 |
| Manager | S, Anand | 1-866-354-9295 #8011253 | +919742268520 |

The contacts within CGI Stay back Unix Support Team are:

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Phone | Pager |
| Primary | Ricky Zhao | 905-858-7100 x1207309 | 416-550-9026 |
| Team Lead | Kenny (Hin Ing) Lee  kenny.lee@cgi.com | 905-858-7100 x1207306 | 416-254-5847 |
| Manager | Jeff Hanley | 519-317-4519 | 519-317-4519 |

### CGI Backup & Restore

**CGI Backup & Restore Level 1**

The CGI Backup & Restore Level 1 support high level responsibilities include:

* All NetBackup actions (backup, restore and troubleshooting
* Issue recall requests
* Bare Metal Recovery of servers
* Issuing tickets for audit compliance
* Yearly & semi-annual validations/ audits
* Configuration of tape drives (SLConsole and VOP GUI’s)
* Adhoc backup requests

**CGI Backup & Restore Stay Back**

* Complex NetBackup Operations
  + - SRT creation/configuration
    - Master server recovery
    - Addition of new users into java auth configuration
    - Provisioning of new backups
* Backup & Restore Stay Back
* Complex NetBackup Operations
* SRT creation/configuration
* Master server recovery
* Addition of new users into java auth configuration
* Provisioning of new backups
* Onsite Operations
* All media handling
* Physical support of tape library and master server

**ITSM Support group assignment:**

* CGI Support to BM /BTV / BDI/ BC ** Backup & Storage Management ** Centralized Backup Operations

|  |  |  |
| --- | --- | --- |
| Role | Name | e-Mail |
| Backup & Restore Prime | [N/A](mailto:richard.jamgotchian@cgi.com) | [Hway.Storage.team.BAN.INDIA@cgi.com](mailto:Hway.Storage.team.BAN.INDIA@cgi.com) |

### CGI PatchLink

**ITSM Support group assignment:**

* + CGI Support to BC/BM/BDI/BTV -> Release Management -> Patch Management – Server

The CGI PatchLink team coordinates the patch installation on servers.

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Hours | Phone |
| CGI-Patchlink Team |  |  |  |

### CGI DSO Security Team (McAfee suite)

CGI DSO Security is responsible for maintaining and operating the McAfee products installed in the CDE and for referring ArcSight related incident to CGI GMSS

**ITSM Support group assignment:**

* + CGI Support to BC/BM/BDI/BTV -> Security Management -> McAfee Services

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Phone | Pager/Cell |
| Primary | Brenda Thorne |  | As per ITSM |
| Manager | Lisa Chaffey | 519-686-8078 | 519-280-7934 |
| Client Service Manager | Andrew Atkinson | 613-740-5900 #5680 | 613-203-2554 |

### CGI GMSS - ArcSight Support

* Investigate and resolve ArcSight Agent related incidents, as received from DSO Security

**ITSM Support group assignment:**

* + Assigned Group:  CGI Support to BC -> Security Management -> ArcSight Application Support

The contacts within CGI GMSS (Ottawa) are as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Role | Name | Email | Phone | Pager |
| Primary | CGI GMSS | [Soc.mss@cgi.com](mailto:Soc.mss@cgi.com) | 1-866-677-7472 or 613-742-2417 |  |
| Team Leader | Tim Hersey | [Tim.hersey@cgi.com](mailto:Tim.hersey@cgi.com) | 613740-5900 x5354 |  |
| Manager | Marc Bercier | [Marc.bercier@cgi.com](mailto:Marc.bercier@cgi.com) | 613-740-5912 |  |
| Client Service Manager | Andrew Atkinson | N/A | 613-740-5900 x5680 | 613-203-2554 |

### CGI Monitoring, Performance, and Capacity (MPC)

The CGI CSB Monitoring, Performance and Capacity (MPC) support team will perform a primary Tier 2 support role for the Compuware software suite and Foglight scripted testing tool.  Incidents identified as application related by the customer or the Help Desk will refer the calls to the Compuware ITSM queue.  At a high level the team will:

* Monitor availability of system via the existing Compuware alerts
* Perform problem determination on the Compuware software incident
* Lead the recovery from system crashes with assistance from DSO
* Escalate alerts to IMC Bell Canada or Bell Mobility / BDI Help Desk when appropriate.
* Perform activities as per Compuware Operations Procedures
* Manage access Control to the Compuware software
* Participate in problem resolution processes related to Compuware suite
* Ensure appropriate server backup processes are running as per operational procedures
* Interface with Compuware Vantage Vendor Support

**ITSM Support group assignment:**

* + CGI Support to BC/BM/BDI/BTV ->  Application Management Tier 1 -> Compuware

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | House of Operations (EST) | Phone |
| CGI MPC Team | [MPC\_SUPPORT.CSB@CGI.COM](mailto:MPC_SUPPORT.CSB@CGI.COM) | Mon– Fri 8am–5pm  If weekends Pager Support | +91 953-896-6431 (24/7) |
| IGDC-Escalation Manager for MPC | S Raja Ramachandran  [rajaramachandran.s@cgi.com](mailto:rajaramachandran.s@cgi.com) | Mon– Fri 8am–5pm | +919448832658 |
| CSB-Escalation Manager for MPC | Alan Gordon  [alan.gordon@cgi.com](mailto:alan.gordon@cgi.com) | Mon– Fri 8am–5pm | 514-705-9125 |

### CGI Service Management (SM)

The CGI Service Management (SM) team manages the Network Mediation EnterpriseService Level Agreements (SLA) between CGI and Bell Canada, and is responsible for the following activities:

* Establishment of the Service Level Agreement
* Administration and management of the Service Level Agreement
* Tracking and comparison of trends for Service Level Agreement measures
* Customer Satisfaction Management

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Role** | **Name** | **Hours of  Operation** | **Phone** | **Pager** |
| Prime | Ravi Teja Kothapalli  [raviteja.kothapalli@cgi.com](mailto:raviteja.kothapalli@cgi.com) | 9 am – 5 pm  M-F | 1-866-354-9295  Ext : 8066489 | N/A |
| Manager | Myles Huntoon | 9 am – 5 pm  M-F | 514-415-3036 | 514-957-0939 |

### Bell Application Owner

**The Bell Application Owner’s responsibilities are:**

* Accountable for Application Availability
* Work with Business Partners to resolve Incidents
* Communicate to User Community via an Ignite ticket (for the applicable applications) status and resolution details during Incidents
* Participate in Incident reviews
* Problem and Release Management activities
* Ensure all Change activities are captured on the OTSS Change Calendar
* Review, accept or reject all MOPs
* Perform sanity testing (as applicable)
* Communicate to CGI CSD the Change Management activities on OTSS-ITSM applications pertinent to incident control via an OTSS Bulletin
* Accept escalations from CGI, when required
* Report any detected incidents to CGI CSD

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Phone | Pager |
| Application Owner | Filomena Sauro  [filomena.sauro@bell.ca](mailto:filomena.sauro@bell.ca) | 514-870-6626 | 514-347-8503 cell  514-347-8503 pager |
| AO Manager  Billing Service Management | Rebecca Sedore  [rebecca.sedore@bell.ca](mailto:rebecca.sedore@bell.ca) | 613-354-7200 | 613-328-5795 |
| AO Director  IT Operations – Billing Services | Steve Batah  [s.batah@bell.ca](mailto:s.batah@bell.ca) | 514-786-8800 | 514-869-6811 |

### Bell Billing Services Management

Bell Billing Services Management is the point of contact for Equifax to report incidents (that do not already have a ITSM ticket opened), via e-mail, to be referred to CGI for investigation on the DTS-PVS side.

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Phone | Pager / Cell |
| Prime | Filomena Sauro  [filomena.sauro@bell.ca](mailto:filomena.sauro@bell.ca) | 514-870-6626 | 514-347-8503 cell |
| Backup | Denise Tatone  [denise.tatone@bell.ca](mailto:denise.tatone@bell.ca) | 416-244-2328 |  |
| Manager | Rebecca Sedore  [rebecca.sedore@bell.ca](mailto:rebecca.sedore@bell.ca) | 613-354-7200 | 613-328-2948 |

### Bell Corporate Emergency Management - National Incident Center

The Bell Corporate Emergency Management team is responsible for the following:

* The Bell Corporate Emergency Management team shall be involved in the coordination of any Critical or High incident response and Post Incident activities.

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Phone | e-Mail |
| Prime  (Including Incident and Post Incident activities) | Variable | 1-866-714-0911 | [security@bell.ca](mailto:security@bell.ca) |

### Bell Data Network Services & Support Team (DNSS)

(Formerly NSTS)

* Investigate & resolve load balancing related issues
* Investigate & resolve network connectivity-related issues
* Local Problem Management i.e. look for trends in warnings, alerts, incidents, and file storage utilization associated to the network
* Monitoring of servers for availability, security intrusions (Bell Corporate Security), Firewall, Routers and switches

ITSM Support group assignment for Network related issues:

* + CGI Support to BC -> User Service Desk -> Service Restoration L1

Focus Ticket is assigned to: NSS-TOR-ICN

| **Role** | **Name** | **Focus Queue Name** | **Phone** | **Cell / Pager** | **Availability** |
| --- | --- | --- | --- | --- | --- |
| DNSS Service Manager NOC | n/a | NSS-TOR-ICN | 416-215-5414  1-866-468-1168 |  | Staffed Mon. to Fri  from 8:00am to 6:00pm local time |
| Service Manager | Lorenzo Casanova |  | (514) 870-1430 | 514-248-8000 (C)  514-362-4633 (P) |  |
| Service Manager | Ron Hamilton |  | 416-215-3487 | 416-996-9551 (C)  416-374-5446 (p) |  |
| Tier D – Escalation | David A Crawford |  | 416) 581-3517 | 416-254-6354 (C) |  |
| Tier C – Escalation | Denis Battiston |  | (416) 215-2741 | 416-407-9594 (C) |  |
| Tier B – Escalation | Gid Morson |  | 416) 353-4783 | 416-580-1611 (c)  416-378-4057 (p) |  |
| Tier A – Escalation | Christan Roy |  | 514-870-3271 | 514-949-0907 (c) |  |
| BST / NSS | Don Sellers |  | 613-781-0866 | 613-761-0282 |  |
| BST / NSS | Gary Hopkins |  | 613-785-2335 | 613-794-5445 |  |
| BST / NSS | Bob Noseworthy |  | 416-353-8900 | 416-988-1112 |  |

### Bell Canada Corporate Security C&M

Bell Canada Corporate Security C&M is responsible for:

1. Define and enforce the Corporate Policy on the servers, databases, applications etc.
2. Investigate policy non-compliance incidents
3. Investigate server intrusion incidents
4. Interface with Bell owners on the various types on non-compliancy issues
5. Manage Policy version control
6. Advise CGI MAS DTS-PVS and other interested parties of changes to the security policy version

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Phone Number | Pager |
| Primary | via email: [cm@bell.ca](mailto:cm@bell.ca" \o "blocked::mailto:cm@bell.ca) |  |  |
| Escalation – Prime | Benoit Joubert | 613-244-6211 | 613-294-5615 |
| Escalation - Backup  Associate Dir. (eDiscovery & Compliance Monitoring) | Scott Beauchamp | 613-244-6180 | 613-794-9276 |

### Bell NIDS and WAF team

The Bell NIDS and WAF team are responsible for the following:

* Detect external intrusion and provide an alert.

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Phone | e-Mail |
| Prime | via email: [ssc.support@bell.ca](mailto:ssc.support@bell.ca) |  | [ssc.support@bell.ca](mailto:ssc.support@bell.ca) |

### IBM - DTS-PVS Application Code Support

The IBM team provides support of the DTS-PVS components and is responsible for the following activities:

* Application (Code) support for the Payment Validation Service
* Provide CGI with code fixes for defect resolution
* Interface with CGI MAS DTS-PVS, PayPal, and Equifax, Prism, and CGI MAS DTS-RTS as required for code resolution
* Responsible to inform CGI MAS DTS-PVS upon defect resolution

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Phone | Pager/Cell |
| Duty Pager | N/A | N/A | 416-232-5525 |
| Primary | Fernando Mendoza  [mendoza@ca.ibm.com](mailto:mendoza@ca.ibm.com) | 416-478-9360 x89360 |  |
| Manager | Kamal Dubey [kdubey@ca.ibm.com](mailto:kdubey@ca.ibm.com) | 905-316-0579 | 905-301-5314 cell |

### Oracle - Weblogic Support

Oracle provides Weblogic support.

|  |  |
| --- | --- |
| **Oracle Weblogic Support** | <https://support.oracle.com/CSP/ui/flash.html> |
| **Bell Canada Support ID** | 18072385 |

### Red Hat

Red Hat (the company) provides support of the Linux operating system.

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Phone | e-Mail |
| Bell Canada Prime | N.A | N/A | N/A |
| Bell Canada Backup | N/A | N/A | N/A |
| Red Hat Web Site | <https://www.redhat.com/support/process/production/> | | |

**Interfacing Client Applications Support Teams**

### bell.ca – CGI MAS bell.ca

**ITSM Support group assignment:**

* CGI Support to BTV /BM / BDI/ BC / *🡪* Application Management Tier 2 *🡪* BELLCANMO

bell.ca **Application (Virtstore) Support**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Role** | **Name** | **Hours** | **Remedy** | **Phone** | **Other** |
| Prime |  | 7/24 | Type:  BELL WEB SITE  Group:  PM-VIRTSTORE-SUP | 91-9742268532 | [9742268532@mobileemail.vodafone.in](mailto:9742268532@mobileemail.vodafone.in) |
| IGDC Team Lead | Saroj Kumar Acharya, | 8am–5pm M-F\* | N/A | 1 866-354-9295 x8012294 |  |
| IGDC Manager - Escalation 1 | Pramod Kumar S | 8am–5pm M-F\* | N/A | 1 866-354-9295  x8011826 | +91 98867-48824 |
| CSB Team Lead (Backup) | Michel Fontaine | 8am–5pm M-F\* | N/A | 514-415-3000 x1014335 | 514-414-3822 |
| Manager - Escalation 2 | James Beausoleil | 8am–5pm M-F\* | N/A | 514-415-3683 | 514-220-3692 cell |

**ITSM Support group assignment:**

* CGI Support to BTV /BM / BDI/ BC / *🡪* Application Management Tier 2 *🡪* BELLCANMO

bell.ca **Infrastructure Support**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Role | Name | Hours | Remedy | Phone | Pager |
| bell.ca MAS | Primary Pager | 7/24 | Type:  BELL WEB SITE  Group:  PM-ELECSVCS-SUP | n/a | [9742269087@mobileemail.vodafone.in](mailto:9742269087@mobileemail.vodafone.in" \o "blocked::mailto:9742269087@mobileemail.vodafone.in mailto:9742269087@mobileemail.vodafone.in) |
| bell.ca MAS | Gnanasekar Kalaisevan | 8am–5pm M-F\* | 866-354-9295 x8012184  +919980388511 | [9742268531@mobileemail.vodafone.in](mailto:9742268531@mobileemail.vodafone.in" \o "blocked::mailto:9742268531@mobileemail.vodafone.in mailto:9742268531@mobileemail.vodafone.in) |
| Team Manager | Pramod Kumar S | 8am–5pm M-F\* | N/A | 866-354-9295 x8011826 | +919886748824 cell |
| Manager - Escalation 1 | Joe Koshy | 8am–5pm M-F | N/A | 866-354-9295 x8011625 | +919886212891 cell |
| Manager - Escalation 2 | Maurice Arseneau | 8am–5pm M-F | N/A | 905-762-2780 | 416-550-2977 cell |

\*CGI MAS bell.ca is available outside of these hours via pager as per the Sales & Marketing SLA.

### Credit Express – Bell BST-ORS

**ITSM Support group assignment:**

* Bell Canada -> Support to BC/BM/BDI/BTV -> OTSS-UDB

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Role** | **Name/ e-Mail** | **Hours\*** | **Phone** | **Cell/Pager** |
| Credit Express Support | [udb\_support@bell.ca](mailto:udb_support@bell.ca) | 7am-7pm  M-F |  |  |
| Prime | Nelson Healey  [nelson.healey@bell.ca](mailto:nelson.healey@bell.ca) | 8am–5pm  M-F | 514-870-4900 | 514-891-0381 |
| Backup | Diane Lépine  [diane.lepine@bell.ca](mailto:diane.lepine@bell.ca) | 8am–5pm  M-F | 514-786-7270 |  |
| Manager | Ariel Quintin  [ariel.quintin@bell.ca](mailto:ariel.quintin@bell.ca) | n/a | 514-786-8156 |  |

\* Until a 1-800 number is made available, off hours escalations can be made to Nelson Healy.

### DART – CGI MAS DART

**ITSM Support group assignment:**

* + CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> BTV FIELD OPS BLNG

| Role | Name | Phone | Pager |
| --- | --- | --- | --- |
| CGI/AGDC Application Support  (1st line of Tier II support, IGDC) | n/a |  | [9742268542@mobileemail.vodafone.in](mailto:9742268542@mobileemail.vodafone.in)  [9742268529@mobileemail.vodafone.in](mailto:9742268529@mobileemail.vodafone.in)  [9742269024@mobileemail.vodafone.in](mailto:9742269024@mobileemail.vodafone.in) |
| Manager(IGDC) | Shilpi Chhabra  [shilpi.chhabra@cgi.com](mailto:shilpi.chhabra@cgi.com) | 1-866-354-9295 x8011386  +91 9900243290 |  |
| SDM (IGDC) | Hithesh Koyileri  [hithesh.koyileri@cgi.com](mailto:hithesh.koyileri@cgi.com) | 1-866-354-9295  x8011841  +918095598245 |  |
| Manager – CGI Managed Application Services – Bell TV | Andrew Hung | 416-446 3220 | 416-577 1712 |
| CGI BEV eBusiness Support Director -Escalation | Brad Long | 416-446-2585 | 416-553-6154 |

### ODS – CGI MAS ODS

**ITSM Support group assignment:**

* + CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> EBCC JT2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Role | Name / e-Mail | Operation | Phone | Pager / Mobile |
| CGI AMS | [JT2.IGDC.BAN.INDIA@cgi.com](mailto:JT2.IGDC.BAN.INDIA@cgi.com) | 9am-5pm ET \* | +1 866 354 9295 x8011260 | [9742269045@mobileemail.vodafone.in](mailto:9742269045@mobileemail.vodafone.in) (pager)  +91 97422 69045 (cell) |
| Team Lead – Escalation 1 | Prafull Agrawal | 9am-5pm ET | +91-991-604-8411 | +91 991 604 8411 (cell) |
| IGDC Manager – Escalation 2 | Pramod Kumar s | 9am-5pm ET | 1-866-354-9295 x8011826 | 9449830578 (cell) |
| CSB Manager – Escalation 3 | Ghislain Pepin | 9am-5pm ET | 514-415-3068 | 514-216-9210 |

\* CGI AMS team shall be available on pager off-hours.

### OrderMax – CGI MAS OrderMax

**ITSM Support group assignment:**

* + CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> EBCC JT2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Role | Name / e-Mail | Hours | Phone | Pager / Cell |
| CGI AMS | [JT2.IGDC.BAN.INDIA@cgi.com](mailto:JT2.IGDC.BAN.INDIA@cgi.com) | 9am-5pm ET \* | +1-866-354-9295 x8011260 | [9742269045@mobileemail.vodafone.in](mailto:9742269045@mobileemail.vodafone.in) (pager)  +91 97422 69045 (cell) |
| Team Lead – Escalation 1 | Prafull Agrawal | 9am-5pm ET | +91-991-604-8411 | +91-991-604-8411 (cell) |
| IGDC Manager – Escalation 2 | Pramod Kumar s | 9am-5pm ET | 1-866-354-9295 x8011826 | 9449830578 (cell) |
| CSB Manager – Escalation 3 | Ghislain Pepin | 9am-5pm ET | 514-415-3068 | 514-216-9210 |

\* CGI MAS team shall be available on pager off-hours.

### SIMPLe – CGI MAS SIMPLe

**ITSM Support group assignment:**

* + CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> EBCC JT3

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Phone | Pager |
| Prime on rotation | Anshul Tiwari | 1-866 354 9295 x8013584       +91 8880054187 cell | [9742269029@mobileemail.vodafone.in](mailto:9742269029@mobileemail.vodafone.in) |
| Prime on rotation | Mayuresh Kulkarni | 1-866 354 9295 x8013860  9916870812 cell | [9742269029@mobileemail.vodafone.in](mailto:9742269029@mobileemail.vodafone.in) |
| ADM | Rahul Nesarikar | 1-866 354 9295 x8012262  011 – 9448029146 cell | [9742268548@mobileemail.vodafone.in](mailto:9742268548@mobileemail.vodafone.in) |
| SDM | Joe Koshy | 1-866 354 9295 x8011625  011 – 9886212891 cell |  |

### CGI MAS VAS-POS

**ITSM Support group assignment:**

* + CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> INFRA APPS 1

| Role | Name | Phone | Pager / Cell |
| --- | --- | --- | --- |
| Prime | Rajeev. Nair, Subhash.H | +1 866-354-9295 (x8012262) | [9742269049@mobileemail.vodafone.in](mailto:9742269049@mobileemail.vodafone.in)  Cell : +91-9742269049 |
| Escalation | Rahul Nesarikar | +1 866-354-9295 (x8012262) | [9742268548@mobileemail.vodafone.in](mailto:9742268548@mobileemail.vodafone.in) |
| Service Delivery Manager | Joe Koshy | 1-866 354 9295 x 8011625 | 011-91-9886212891 |
| Onshore Manager | Ganesh Rajamani | (905) 762-2878  (416) 434-1691 cell | N/A |

### Vucare – CGI MAS Vucare

**ITSM Support group assignment:**

* + CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> BTV Programming and Order Mgmt

|  |  |  |  |
| --- | --- | --- | --- |
| **Role** | **Name / e-Mail** | **Pager** | **Other** |
| PRIME | [IGDC\_BTV\_JAVA\_MAS.ban.india@cgi.oom](mailto:IGDC_BTV_JAVA_MAS.ban.india@cgi.oom) | [9742268542@mobileemail.vodafone.in](mailto:9742268542@mobileemail.vodafone.in)  [9742269024@mobileemail.vodafone.in](mailto:9742269024@mobileemail.vodafone.in)  [9742268529@mobileemail.vodafone.in](mailto:9742268529@mobileemail.vodafone.in) | +91-9742268542  +91-9742269024  +91-9742268529 |
| IGDC Application Delivery Manager | Bala Gopala Raju Gopala, Krishna Raju  [balagopala.raju.g@cgi.com](mailto:balagopala.raju.g@cgi.com)  Pallavi Tamhane  [pallavi.tamhane@cgi.com](mailto:pallavi.tamhane@cgi.com) | +91 8095598246 (Bali)  +91 9980599001(Pallavi) |  |
|  |  |  |  |
| CSB Stayback Prime | Joshi, Shantanoo  [shantanoo.joshi@cgi.com](mailto:shantanoo.joshi@cgi.com) | +91 8095501690 |  |
| IGDC Service Delivery Manager | Hithesh Koyileri  [hithesh.koyileri@cgi.com](mailto:hithesh.koyileri@cgi.com) | +91 8095598245 |  |
| CSB Manager | Long, Brad  [brad.long@cgi.com](mailto:brad.long@cgi.com) | 416- 553-6154 |  |

### WAC – CGI MAS WAC

**ITSM Support group assignment:**

* CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> EBUSINESS WAC

|  |  |  |  |
| --- | --- | --- | --- |
| **Role** | **Name** | **Phone** | **Cell / Pager** |
| Prime | Wac support | +18663549295 x8013825 | [9590027293@reliancemobile.blackberry.com](mailto:9590027293@reliancemobile.blackberry.com) |
| Backup | Sharvan Kumar Bajpai | +18663549295 x8011565 | [99742269084@mobileemail.vodafone.in](mailto:99742269084@mobileemail.vodafone.in)  [9052221142@mobileemail.vodafone.in](mailto:9052221142@mobileemail.vodafone.in) |
| Manager/ Escalation | Hemar Yambem-Singh | 905-282-3935 | [4163727075@pager.mobility.com](mailto:4163727075@pager.mobility.com) |

**Credit and Payment Service Providers Support**

### Equifax Support

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Role | Name | Hours of Operation | Phone | e-Mail |
| ADS Team | N/A | 24/7 | 1-800-387-9986\* | [sts@equifax.com](mailto:sts@equifax.com) |

*\* Calls between 6:00 pm and 8 am will be redirected to voice-mail which pages out to an on-duty tech.*



### PayPal Support

|  |  |
| --- | --- |
| Phone | 888-883-0025 |
| Partner ID | amexcanada |
| Premium Support Code | 15975325 |

### Prism – CGI MAS Prism

**ITSM Support group assignment:**

* + CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> BTV FIELD OPS BLNG

|  |  |  |  |
| --- | --- | --- | --- |
| **Role** | **Name** | **Hours** | **Phone/Team pagers** |
| Prime | Shashi Kumar  [sh.kumar@cgi.com](mailto:sh.kumar@cgi.com)  Sidramappa Jante  [sidramappa.jante@cgi.com](mailto:sidramappa.jante@cgi.com)  Arun Kollapadavu  [arun.kollapadavu@cgi.com](mailto:arun.kollapadavu@cgi.com)  Sreenatha Pappu  [sreenatha.pappu@cgi.com](mailto:sreenatha.pappu@cgi.com) | 24/7 | +91 9742268542 - [9742268542@mobileemail.vodafone.in](mailto:9742268542@mobileemail.vodafone.in)  +91 9742269024 [-9742269024@mobileemail.vodafone.in](mailto:-9742269024@mobileemail.vodafone.in)  +91 9742268529 - [9742268529@mobileemail.vodafone.in](mailto:9742268529@mobileemail.vodafone.in) |
| Backup | Jante, Sidramappa  [sidramappa.jante@cgi.com](mailto:sidramappa.jante@cgi.com) | 24/7 | +91 9742268542 |
| Manager | Krishna Raju Bala Gopala Raju Gopala  [balagopala.raju.g@cgi.com](mailto:balagopala.raju.g@cgi.com)  Pallavi Tamhane [pallavi.tamhane@cgi.com](mailto:pallavi.tamhane@cgi.com) | 24/7 | +91 8095598246 |
| CSB Stayback Prime | Shantanoo Joshi  [shantanoo.joshi@cgi.com](mailto:shantanoo.joshi@cgi.com) | N/A | +91 8095501690 |
| CSB Manager | Brad Long  [brad.long@cgi.com](mailto:brad.long@cgi.com) | N/A | (416) 553-6154 |
| Team e-Mail |

### IBM contact for Patching

|  |  |
| --- | --- |
| Name | Email Id |
| IBM Front Door | [walter@ca.ibm.com](mailto:walter@ca.ibm.com) |
| IBM Infrastructure | [casrar@ca.ibm.com](mailto:casrar@ca.ibm.com), |

# Problem Identification and Resolution

## Incident Call Flow Diagram



## Detailed Incident Call Flow

### Reporting an Incident

There are no direct end users of DTS-PVS, so no users would be calling into the helpdesk for DTS-PVS issues.

DTS-PVS incidents can be identified by interfacing applications’ support teams or by CGI MAS DTS-PVS.

External Credit and Payment Service Providers can also report incidents:

* **Equifax**: If Equifax needs to report an incident that requires investigation on the DTS-PVS side, they should e-mail the resources on the Bell Billing Services Management team (see 6.2[Bell Billing Services Management](#_Bell_Billing_Services_1)), including incident description, incident timing, and account/transaction examples (if any). The Billing Services Management team will open a ITSM ticket with the CSD, under the DTS-PVS application.
* **PayPal**: If PayPal needs to report an incident that requires investigation on the DTS-PVS side, they report the incident to the appropriate OTSS resource, who refers the incident to the Bell Account Manager, who in turn will open a ticket with the CGI CSD.

### Responding to an Incident

After ruling out other possible causes, the CSD SRA will create an ITSM ticket, with product **DTS-PVS** and assign it to group **IM-DTS-PCI**.

For Critical or High incidents, the CSD SRA will engage SRS, to invoke Incident Management.

CGI MAS DTS-PVS investigates the incident:

* **Security** – security incidents are referred to the Bell Corporate Emergency team by the CGI MAS DTS-PVS manager
* **Server** – Server related incidents are referred to CGI Linux Support, via ITSM
* **Alteon Load Balancer or network** – Incidents related to the load balancer or the network are referred to the CSD to be resolved as per existing process
* **ArcSight** – ArcSight related incidents are referred to DSO Security, via ITSM
* **Weblogic** – Weblogic incidents are referred to Oracle
* **DTS-RTS** – Incidents related to DTS-RTS are referred to CGI MAS DTS-RTS, via ITSM
* **Interfacing (BSS) user applications** – Incidents related to an interfacing user application are referred to that applications support
* **Credit and Payment Service Provider** – Incidents related to a service provider are referred to that service provider’s support
* Any other incidents are resolved by CGI MAS DTS-PVS, with the assistance of other support teams, as required.

See the Incident Assignment Chart below for assignment info.

**If any of the support teams need to upgrade a ticket from sev.3 to sev.1 or sev.2, they must call the CSD to have the ticket upgraded and IMC engaged.**

### Incident Assignment Chart

|  |  |  |
| --- | --- | --- |
| **Component** | **Supported By** | **Assignment Info** |
| **ITSM Assignment** |
| **DTS-PVS Incidents** | | |
| ArcSight | CGI GMSS | Assigned Group:  CGI Support to BC -> Security Management -> ArcSight Application Support |
| Backup and Restore | CGI Backup and Restore team | CGI Support to BM /BTV / BDI/ BC -> Backup & Storage Management -> Centralized Backup Operations |
| Bell Security | Bell Corporate Security C&M | See section 6.2 [Bell Canada Corporate Security C&M](#_Bell_Canada_Corporate) |
| Compuware | CGI MPC | CGI Support to BC/BM/BDI/BTV ->  Application Management Tier 1 -> Compuware |
| DTS-PVS (Tier 2) | CGI | CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> DTS SUP |
| DTS-PVS (Tier 3) | IBM | see section 6.2 [IBM - DTS-PVS Application Code Support](#_IBM_-_DTS-PVS) |
| DTS-RTS | CGI MAS DTS-RTS | CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> DTS SUP |
| External Intrusion | Bell NIDS and WAF | See section 6.2 [Bell NIDS and WAF team](#_Bell_NIDS_and) |
| Linux | Red Hat | See section 6.2 [Red Hat](#_Red_Hat) |
| Load Balancer | Bell DNSS | ITSM template : Focus reference ticket  CGI Support to BC -> User Service Desk -> Service Restoration L1 Focus ticket is assigned to NSS-TOR-ICN |
| McAfee | CGI Security team | CGI Support to BC/BM/BDI/BTV -> Security Management -> McAfee Services |
| PatchLink | CGI PatchLink team | CGI Support to BC/BM/BDI/BTV -> Release Management -> Patch Management – Server |
| Server | CGI Linux Support | CGI Support to BC/BM/BDI/BTV -> Server Management -> Unix |
| Weblogic | Oracle | See section 6.2 [Oracle - Weblogic Support](#_Oracle_-_Weblogic) |
| **Interfacing User Applications (BSS)** | | |
| Bell.ca Shop | CGI MAS bell.ca | CGI Support to BTV /BM / BDI/ BC / *🡪* Application Management Tier 2 *🡪* BELLCANMO |
| Credit Express | Bell BST-ORS | See section 6.2 [Credit Express – Bell BST-ORS](#_Credit_Express_–) |
| DART | CGI MAS DART | CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> BTV FIELD OPS BLNG |
| ODS | CGI MAS ODS | CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> EBCC JT2 |
| OrderMax | CGI MAS OrderMax | CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> EBCC JT2 |
| SIMPLe | CGI MAS SIMPLe | CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> EBCC JT3 |
| VAS-POS | CGI MAS VAS-POS | CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> INFRA APPS 1 |
| VuCare | CGI MAS VuCare | CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> BTV Programming and Order Mgmt |
| WAC | CGI MAS WAC | CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> EBUSINESS WAC |
| **Credit and Payment Service Providers** | | |
| Equifax | Equifax Support | see section 6.2 [Equifax Support](#_Equifax_Support) |
| PayPal | PayPal Support | see section 6.2 [PayPal Support](#_PayPal_Support) |
| Prism | CGI MAS Prism | CGI Support to BC/BM/BDI/BTV -> Application Management Tier 2 -> BTV FIELD OPS BLNG |

See section 6.2 [Support Groups](#_Support_Groups) for further details on the support teams.

## Problem Escalation

Critical problems are escalated for immediate attention and resolution. The escalation must be performed to ensure that the proper resources have been assigned to resolve the problem in a timely manner. The guidelines are based on the criticality level of the problem. If the resolution target is exceeded for a given criticality level, then it is raised to the next level.

For escalation contacts and time frames, refer to the Service Level Agreement (SLA).

Note that escalations will occur only during application support hours.

# Monitoring/Support Tools

The following tools are used to support this application:

General

* **ITSM** is used by all CGI support teams to record and track incidents.

Please note that when an ITSM CI is used to open a ticket, a copy of the ticket is sent to the Bell OTSS team for information purposes only. For more details about this process and the Bell OTSS, please refer to the OTSS – ITSM Production Guide (contact [oi.itm@cgi.com](mailto:oi.itm@cgi.com" \o "mailto:oi.itm@cgi.com) for the document).

**Compuware ServerVantage:** Monitors applications, servers and databases and identifying problems before they impact critical business processes. ServerVantage corrects problems without operator intervention.

# Change Management

Refer to the DTS-RTS production guide, section 9 Change Management.

Appendix A – Payment Service Primary Operations

## A.1 Payment Validation

The DTS-PVS Payment Validation Operation is used to validate the payment method information provided by a customer against their existing banking or credit card information on record. There are two payment methods supported as inputs to this operation:

1. Credit Card Information
2. Banking Information

The payment method information can be optionally supplemented by an address. If an address is provided for a credit card payment method, the Payment Validation operation will verify if the address information provided by the customer matches address information on file in the customer's credit bureau.

Upon receiving a service request for the operation, the service will ensure that all requisite information has been received for each payment method identified in the request. For example, if banking information has been identified as payment method, the service will verify that all the required data elements associated with banking information, as necessary for processing the operation, have been included in the request. The service will validate the format of this information and will employ auxiliary systems to assist in validating the values.

For credit card payment methods, the service will expect to receive a tokenized value (i.e. a "token"), representing the customer's credit card primary account number (PAN), as part of the credit card information. The DTS-PVS service will integrate with the DTS-RTS service to de-tokenize the token into the actual credit card PAN, in order to pass the credit card PAN to external third parties as required for payment validation activities. Specifically, DTS-PVS will integrate with Equifax to validate the credit card customer's address (if provided) with the address on-file at the credit bureau. DTS-PVS will then attempt to authorize the amount provided on the service request (or a default amount, if none is provided) via integration with the PayPal payment gateway.

For banking information payment methods, the service will validate the supplied information on the service request for pre-authorized debit payments via integration with PRISM.

***Source:*** *DTS-PS – Payment Validation Operation v0.5.doc*

## A.2 Credit Card Charge and Refund

The DTS-PVS Credit Card Charge and Refund Operation is used to process two specific credit card transactions via the PayPal payment gateway:

1. **Credit Card Charge (aka "Sale")**

This transaction is used to charge a specified amount against an account, marking the transaction for immediate funds transfer during the next settlement period.

1. **Credit Card Refund (aka "Credit")**

This transaction is used to refund a specified amount to a cardholder account.

The only payment method supported by this operation is credit card, and credit card information is assumed to have been validated prior to invoking the operation.

The transaction type (i.e. sale or credit), credit card information and the associated charge/refund amount are expected to be provided for the service operation by the Service Consumer. Additionally, the service operation will accept an optional transaction ID as an input to correlate the charge/refund transaction to a previous PayPal authorization/charge transaction, respectively.

Upon receiving a service request for the operation, the service will ensure that all requisite information has been received for each payment method identified in the request. For example, the service will verify that all the required data elements associated with credit card information, as necessary for processing the operation, have been included in the request. The service will validate the format of this information and will employ auxiliary systems to assist in validating the values.

For all credit card payment methods, the service will expect to receive a tokenized value (i.e. a "token"), representing the customer's credit card primary account number (PAN), as part of the credit card information. The DTS-PVS service will integrate with the DTS service to de-tokenize the token into the actual credit card PAN, in order to pass the credit card PAN to external third parties as required for charge or refund processing. Specifically, DTS-PVS will integrate with the PayPal payment gateway to attempt to process the charge or refund transaction, using the specified amount, against the credit card information provided.

**Source:** DTS-PS – Credit Card Charge and Refund Operation v0.5.doc

Appendix B - System Messages

## B.1 DTS-PVS Error Codes

| **Message Code** | **Description** | **Trigger** |
| --- | --- | --- |
| OMSE0001 | <field name> is a mandatory field | A field designated as mandatory has not been provided. |
| OMSE0002 | <field name> must be numeric | Field designated as numeric contains non-numeric characters. |
| OMSE0003 | Invalid Postal Code format. Canadian Postal Code must be X9X9X9 | Postal code field contains data in a format other than A9A9A9. |
| OMSE0004 | {PARM} cannot be less than {PARM} characters | Minimum field length has not been completed. |
| OMSE0005 | Invalid Request. | If System determines that the request violates the interface specifications defined. For each element in the request that does not conform to the expected value in any other way, System adds the OMSE0005 message (along with the name of the element) to a list of messages associated with the entire transaction |
| OMSE0006 | {PARM} cannot be greater than {PARM} characters. | Maximum Field length has been exceeded. |
| OMSE0007 | <field name> contains invalid value | Field contains data not in the enumerated list of expected values. |
| OPVE0001 | PayPal is unavailable. Different payment method is required. | General catch-all exception, e.g. unrecognized response from PayPal OR connection to PayPal is down OR no response from PayPal within expected time OR the Result is a negative number (i.e. a PayPal defined system error). |
| OPVE0002 | The credit card transaction for this order could not be processed. (status code: XXX). Change or verify credit card number. | The Result (Output Field #2) is one of 12 (Declined), 23 (Invalid Account Number), 24 (Invalid Expiration Date), or 50 (Insufficient Funds Available in Account). OR The Result (Output Field #2) is any number other than 0 (Approved), 12, 23, 24, 50, or a negative number. |
| OPVE0003 | <field name> unable to validate. | The credit card did not pass the Mod 10 check. |
| OPVE0005 | Banking information that has been entered is not valid. Re-enter account info. | PRISM returns a 'N' (bank institution # and bank transit combination is invalid) response. |
| OPVE0007 | Address mismatch OR no credit file found. | Equifax returns the results of the QuickMatch AVS check – address mismatch or no credit file found. |
| OPVE0008 | Credit card invalid. | Credit Card fails Mod 10 Validation. |
| OPVE0010 | Invalid PayPal merchant identifier. | If the merchant identifier was specified by the Service Consumer and the PayPal System responds with an error message that indicates an invalid merchant identifier. |
| OPVE0011 | Invalid payment method details. | If the System determines that the payment method to be validated does not contain one and only one of the following payment method types: credit card, banking information, invoiced account details. |
| OPVE0012 | Equifax encountered an error. | If the Equifax service was unable to determine the address provided is a match or mismatch, due to difficulties determining the comparison file, or incomplete supplied information. Or a general Equifax unavailability error. |
| OPVE0013 | Invalid security code. | When the 3 digit security code is not validated by PayPal, then an error will be returned to the PV service |
| OPVE0014 | The pre-authorized payment validation facility is not yet available. | The OMS link to PRISM to validate PAP information is not yet available for use. Another payment method must be selected. |
| OPVE0015 | A fraud warning was issued for an Equifax address validation request. | Reserved for future use. This is not presented back to the channel. It is used for fraud warnings received by the service from Equifax. These are currently being ignored. |
| OPVE0016 | Verify the security code on the back of the credit card. | The credit card security code is not the correct length for the card type entered.(3 for VISA, MasterCard, 4 digits for AMEX) |
| OPVW004 | PRISM is not available. | Connection to PRISM is down, or no response from PRISM within expected time. |

***Source:*** *DTS-PS – Payment Validation Operation v0.5.doc*

## B.2 DTS-RTS Error Codes

| Status Code | Description | Conditions when the error is raised | DTS-PVS Error Code Mapping |
| --- | --- | --- | --- |
| DTS000 | Success status code | Any Successful Scenario | N/A |
| DTSE0001 | Internal DTS Communication Failure  DTS-RTS will return this error code for an authentication fails or unknown Internal DTS-RTS Error | When any DTS-RTS Internal error happened including a failed authentication. | OMSE0005 |
| DTSE0101 | PAN failed LUHN-10 Check | When a pan failed the LUHN-10 Check Algorithm. | OPVE0008 |
| DTSE0102 | Token failed LUHN-10 check | When a token failed the LUHN-10 Check Algorithm. | OPVE0008 |
| DTSE0103 | Credit Card or Token Type is not Accepted by Bell | When a credit card is not Amex(AMEX34, AMEX37), MC(MC51, MC52, MC53, MC54, MC55) or VISA | OPVE0008 |
| DTSE0105 | DTS Failure to Tokenize | When an error happened with RTS System | OMSE0005 |
| DTSE0106 | DTS Failure to De-tokenize | When an error happened with RTS System | OMSE0005 |
| DTSE0109 | BSS: “ConsumerID” is not authorized for this Destination:“*Destination Type*” | When BSS is not authorized for the Destination RTS\_T (Tokenization) | OMSE0005 |
| DTSE0110 | Error occurred when communicating with Destination:“*Destination Type*”, . “*Error Message*” | When BSS is not authorized for the Destination RTS\_D (Detokenization) | OMSE0005 |
| DTSWS001 | Required field consumerID is missing |  | OMSE0005 |
| DTSWS002 | Required field applicationID is missing |  | OMSE0005 |
| DTSWS003 | Required field passkey is missing |  | OMSE0005 |
| DTSWS004 | Required field *Token* is missing | When *Token* is not sent in the request | OMSE0005 |
| DTSWS005 | *Token* must be 15 or 16 digits | When the no. of digits in the *Token* is less than 15 or greater than 16 digits | OPVE0008 |
| DTSWS006 | *Token* must contain digits only | When a *Token* is not a numeric | OPVE0008 |
| DTSWS007 | Required field *PAN* is missing | When PAN is not sent in the request | OPVE0008 |
| DTSWS008 | PAN must be 15 or 16 digits | When the no. of digits in the PAN is less than 15 or greater than 16 digits | OPVE0008 |
| DTSWS009 | PAN must contain digits only | When a PAN is not a numeric | OPVE0008 |
| DTSWS020 | Required field destinationType is missing, invalid or exceeding max length | When DestinationType is missing, invalid or exceeding max length | OMSE0005 |
| DTSWS021 | Required field serviceType is missing, invalid or exceeding max length | When serviceType is missing, invalid or exceeding max length | OMSE0005 |
| DTSWS022 | Required field messageFormat is missing, invalid or exceeding max length | When messageFormat is missing, invalid or exceeding max length | OMSE0005 |
| DTSWS023 | Required field bssMessage is missing | When bssMessage is missing | OMSE0005 |
| DTSWS024 | bssMessage value not valid/allowed for this operation | When a bssMessage is not valid/allowed for this operation | OMSE0005 |
| DTSWS025 | Certificate details validation failure | This error occurs when the certificate information are not valid. | OMSE0005 |

***Source:*** *DTS-PS – Payment Validation Operation v0.5.doc*

Appendix C – Payment Validation Operation Scenarios

***Source:*** *DTS-PS – Payment Validation Operation v0.5.doc*

**Scenario 1**:

There are no validation errors detected within the service request. All payment requests are successful.

**Behavior:**

* The service response header will set the success indicator to ‘Success’.
* The service response body will include successful response for each payment validation request including the authorization number if a credit validation was requested.

**Scenario 2:**

There were no validation errors detected within the service request. At least one of the payment requests was able to successfully complete the call to a service provider (i.e. DTS-RTS, PayPal, PRISM, Equifax).

**Behavior:**

* The service response header will set the success indicator to ‘Success’.
* The service response body will include unsuccessful payment validation for each payment request that encountered a communication error.
* The corresponding error code and message be included within a message list associated with the original payment request.
* The service response body will include successful response for each payment validation request including the authorization number if a credit validation was requested.

**Example:**

A service request contains two payment validation requests – one for pre-authorized payment and the other one for credit card. First request failed on the call to PRISM. The result of the second request is authorized and the authorization number is returned. In this scenario, the response header success indicator will be set to ‘Success’ because the service call to PayPal was able to complete.

**Scenario 3:**

There were no validation errors detected within the service request. All payment requests failed resulting from a failure to communicate with service providers (i.e. DTS-RTS, PayPal, PRISM, Equifax).

**Behavior:**

* The service response header will set the success indicator to ‘Failed’.
* The service response body will include unsuccessful payment validation for each payment request that encountered a communication error.
* The corresponding error code and message be included within a message list associated with the original payment request.

**Scenario 4**:

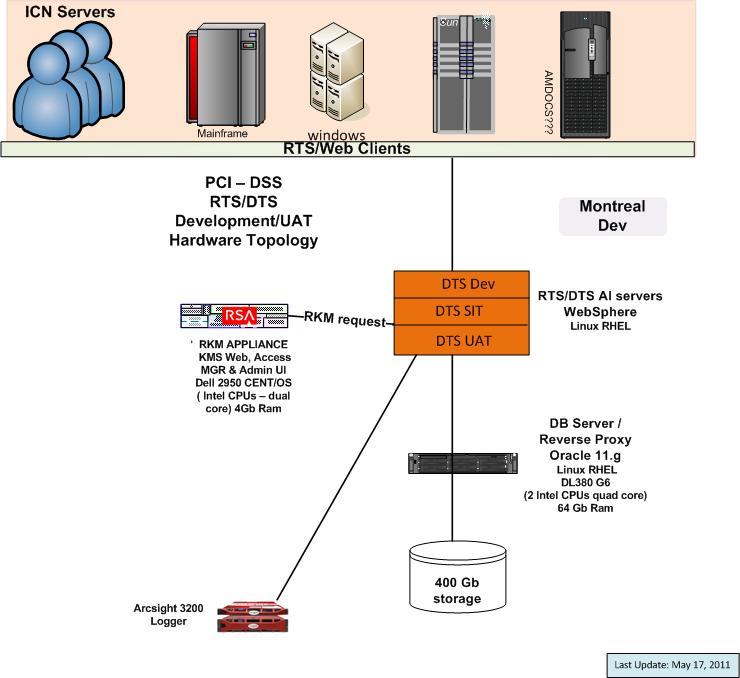
Validation errors have been detected in at least one of the payment validation requests included within the service request.

**Behavior:**

* The service response header will set the success indicator to ‘Failed’.
* The service response body will contain a list of one or more payment validation responses. Each element within the list will contain a list of one or more validation error messages.

Appendix D – Development Environment (ICN)

The diagram below depicts the PCI Dev-UAT environment on the ICN.



Appendix E – Glossary

|  |  |
| --- | --- |
| **Acronym** | **Expanded Form** |
| BSS | Bell Support Systems |
| CDE | Cardholder Data Environment. Area of computer system network that possesses cardholder data or sensitive authentication data and those systems and segments that directly attach or support cardholder processing, storage, or transmission. Adequate network segmentation, which isolates systems that store, process, or transmit cardholder data from those that do not, may reduce the scope of the cardholder data environment and thus the scope of the PCI DSS assessment. A cardholder data environment is comprised of system components. |
| CDE DMZ | Cardholder Data Environment De-Militarized Zone. A portion of the cardholder data environment (CDE) that is Internet-facing. |
| CHD | Cardholder Data. Cardholder data includes the primary account number (PAN), the cardholder name, card expiry data, and the service code |
| Card Verification Code or Value | Refers to either: (1) magnetic-stripe data, or (2) printed security features.   1. Data element on a card's magnetic stripe that uses secure cryptographic process to protect data integrity on the stripe, and reveals any alteration or counterfeiting. Referred to as CAV, CVC, CVV, or CSC depending on payment card brand. The following list provides the terms for each card brand:  * CAV – Card Authentication Value (JCB payment cards) * CVC – Card Validation Code (MasterCard payment cards) * CVV – Card Verification Value (Visa and Discover payment cards) * CSC – Card Security Code (American Express)  1. For Discover, JCB, MasterCard, and Visa payment cards, the second type of card verification value or code is the rightmost three-digit value printed in the signature panel area on the back of the card. For American Express payment cards, the code is a four-digit un-embossed number printed above the PAN on the face of the payment cards. The code is uniquely associated with each individual piece of plastic and ties the PAN to the plastic. The following provides an overview:  * CID – Card Identification Number (American Express and Discover payment cards) * CAV2 – Card Authentication Value 2 (JCB payment cards) * CVC2 – Card Validation Code 2 (MasterCard payment cards) * CVV2 – Card Verification Value 2 (Visa payment cards) |
| DART | Dispatch Activation Repair Tool |
| DNSS | Data Network Services & Support (Bell) |
| DSS | Data Security Standard |
| DTS | Data Tokenization System |
| LUHN-10 | An algorithm for character-based error control, defining a common format for credit cards. |
| MPC | Monitoring, Performance, and Capacity (CGI) |
| OMF | Order Management Framework |
| PAN | Primary Account Number  The 13- to 16-digit credit card number that uniquely identifies the particular credit card account owner, and the credit card issuer. |
| PCI | Payment Card Industry |
| PCI DSS | The Payment Card Industry (PCI) Data Security Standard (DSS) was developed to encourage and enhance cardholder data security and facilitate the broad adoption of consistent data security measures globally. The DSS consists of 12 requirements, each of which has sub-sets of control requirements. The current version of the DSS is version 2, effective July 2009. |
| PVS | Payment Validation Service |
| RTS | RSA Tokenization System |
| Tokenization | Tokenization is the process of replacing sensitive data with unique identification symbols that retain all the essential information without compromising its security. The token has no mathematical relationship to the data it represents. |
| VAS-POS | Value Added Services – Payment Of Service |
| WAC | Wireless Activation Center |