

File No.: 04-1000-20-2024-181

June 4, 2024

s.22(1)

Dear s.22(1)

Re: Request for Access to Records under the Freedom of Information and Protection of Privacy Act (the "Act")

I am responding to your request of March 19, 2024 under the *Freedom of Information and Protection of Privacy Act* for:

Record of the incident report and correspondence (including email and text messages) relating to the March 16, 2024 IT service outage at E-Comm, for the period of 2 a.m. to 5 p.m., held by CTO Tadhg Healy.

All responsive records are attached. Some information in the records has been severed (blacked out) under s.13(1), s.15(1)(l), and s.22(1) of the Act. You can read or download these sections here: http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/96165_00.

Under section 52 of the Act, and within 30 business days of receipt of this letter, you may ask the Information & Privacy Commissioner to review any matter related to the City's response to your FOI request by writing to: Office of the Information & Privacy Commissioner, info@oipc.bc.ca or by phoning 250-387-5629.

If you request a review, please provide the Commissioner's office with: 1) the request number (#04-1000-20-2024-181); 2) a copy of this letter; 3) a copy of your original request; and 4) detailed reasons why you are seeking the review.

Yours truly,

Kevin Tuerlings, FOI Case Manager, for

[Signed by Kevin Tuerlings]

Cobi Falconer, MAS, MLIS, CIPP/C
Director, Access to Information & Privacy
cobi.falconer@vancouver.ca
453 W. 12th Avenue Vancouver BC V5Y 1V4

If you have any questions, please email us at foi@vancouver.ca and we will respond to you as soon as possible. Alternatively, you can call the FOI Case Manager at 604-871-6584.

Encl. (Response Package)

:lg



Shoji, Miki 3/16 10:12 AM Edited

Apps & integration Channel created for ECOM AC failure Incident

Apps / integration managers invited, and I'm moving all files to here for others to access.



Reply



Shoji, Miki 3/16 10:59 AM

Apps & integration Status updates

Thank you Apps managers & staff who are responding to this incident. Cvetkovic, Zoran created a tracking sheet for status of our system here under files : APPS - RED LIST, Recovery Status.xlsx.
Please update the status for all critical systems.

- the RED list (revised by Eric) is ONLY good for TOP ~ 10 rows, where the Restore sequence is prioritized.
- Gives a sense that major systems (SAP, Municipal) should be restored before .NET and OutSystems



APPS - RED LIST, Recovery Status.xlsx

msteams_f1b2b3 > Applications and Integratio...



Reply



Shoji, Miki 3/16 12:44 PM



As of 12:30 - majority critical items back up and running

Most of the major applications are up and running at this time. Shifting to few remaining applications.

Focus on the next few hours are:

- API Gateway
- Telestaff
- IcePay
- Identification and checking on any further applications (i.e. AP flow)
- integrations and smaller services / inter system processes (i.e. payment portal)



Healy, Tadhg 3/16 2:01 PM

thanks March 15 - ECOM AC Failure Incident for all your amazing work today so far.



Reply





Shoji, Miki 3/16 12:16 PM



Ecomm outage - Apps team call

Saturday, March 16, 2024 2:00 PM



Join

A quick round table for **apps lead** for this outage. (@Tom, @cathrine, you are optional as you do manage applications, so feel free to join us if it helps).

Agenda:

- Current Status (all teams), and anything stopping from moving forward
- Anything you need from other teams (systems, DBAs, network, leadership etc.)
- Comm plan
- today, tomorrow and next week recovery plan

I have intentionally didn't send the invite to your staff - as they often just like to get the work done... But, if your team members like to join to hear updates etc. - feel free to invite them.

Miki

[see less](#)

↑ replies from Shoji, Miki

📅 3/16 2:38 PM Meeting ended: 39m 45s

Shoji, Miki 3/16 2:51 PM Edited

Apps status as of 2:30 - majority green, some SAS team follow ups, other teams standing down for the weekend

Apps teams call summary:

Major applications are back and running. Few follow up items remaining for SAS team applications:

- API gateway (splunk seems to have issue, and continue to fix - hoping for recovery in the next few hours)
 - impacting some EM pro integrations, CAMS APIs and other REACT applications that uses API gateway
- Telestaff, APFlow, Legal, SEAM, a few small access apps are on SAS list to check
- There may be a gap in "business owned applications", only one SAS team is following up is ActiveNet. Not sure about Engineering and other team owned systems.
- Requesting list of all DBs that were failed over to secondary center. We will leave them in secondary fail over for the weekend as they all seem to be working well, and put together recovery plan back to primary next week with DBA.
- Requesting detail technical description of outage (duration of time, servers - assuming everything in eComm?) as there would have been a large number of processing over the weekend that did not get completed we need to follow up on Monday.
- other less critical systems will be postponed to Monday morning checking. All teams will have resource early on Monday to deal with unexpected calls from this incidents.

All apps & int teams except for SAS is standing down shortly (though managers / critical staff has cells). SAS team will likely to go for the next few hours to get to most of the checking, and make a call to restart tomorrow or postpone remaining to Monday.
[see less](#)

Shoji, Miki 3/16 3:33 PM

API gateway, Telestaff & ActiveNet all confirmed to be working as of 3:15

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Reply



Shoji, Miki 3/16 4:57 PM Edited

App status as of 4:30pm - All critical apps GREEN - Apps teams standing down for the weekend

Confirmed all critical applications are up and running.

- SAS team confirmed remaining critical applications up & running - updated on our tracking sheet; System Status Workbook.xlsx
- All Applications teams including SAS are now standing down for the weekend
- Teams will be on early on Monday to follow up on any tickets when users come online
- Further follow up on missed processes, back to primary, or any other non-critical system (i.e. dev / uats) will be fixed next week
- Apps managers / critical staff has cell with them over the weekend, if need to re-activate the teams

Thank you all for your prompt support to bring everything back up and running today!!!



System Status Workbook.xlsx

msteams_f1b2b3 > General



Shoji, Miki 3/16 5:05 PM

more detail is in Apps tracking sheet here: APPS - RED LIST, Recovery Status.xlsx (sorry we didn't have time to consolidate, but we have updated both, so should have the same info)



APPS - RED LIST, Recovery Status.xlsx

msteams_f1b2b3 > Applications and Integratio...



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Reply



Healy, Tadhg 3/16 8:47 AM Edited

General updates

Just spoke with Sandra Singh (CMO) - she will get in touch with CEC and have them contact me Traer, Richard



1



Healy, Tadhg 3/16 9:01 AM

CRO and Chief Comms Officer updated



Healy, Tadhg 3/16 9:11 AM

Summary email sent to DCM - Sandra Singh



Healy, Tadhg 3/16 9:23 AM

Just spoke with godfrey (CEC) - messaging going up on social shortly



Healy, Tadhg 3/16 9:29 AM

Status / update email sent to CLT and Mayor and Council



Healy, Tadhg 3/16 9:38 AM Edited

Contacted VPL -Kay Cahill - no answer - left vm

Christina de Castell has been informed also via email



Healy, Tadhg 3/16 10:26 AM

Chief Safety Officer informed



Healy, Tadhg 3/16 2:21 PM

Update sent to all TS Managers and CLT



1



Godfrey >

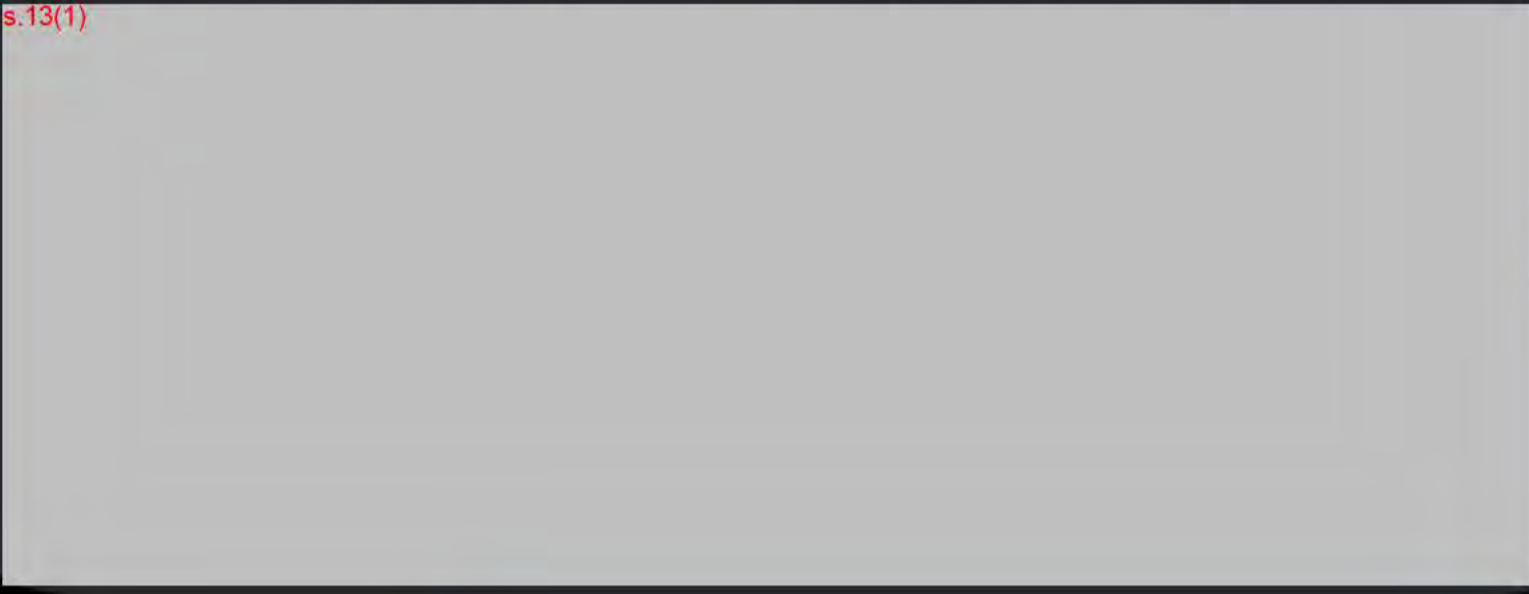
iMessage
Sat, Mar 16 at 9:07 AM

Hi Tadhg it's Godfrey. I'll call you in a couple minutes

Sat, Mar 16 at 1:37 PM

How's this for an update to social?:

s.13(1)



s.13(1)



"Many of our services, including 311, are now back up and running. Staff continue to work to restore all services impacted by the outage. Thanks for your patience #Vancouver."

Reworded a bit. Look ok?



Perfect

Delivered



iMessage





Nick Crampton >

Sat, Mar 16 at 11:05 AM

Hi there

We're experiencing a significant outage this morning

Not dissimilar to what we practiced on Wednesday

If you can log on that would be great

Leadership call at 1115

Hey Tadhg - thanks for letting me know. I'll dial in shortly

Ty

Read 2024-03-16



iMessage





Karen >



Sat, Mar 16 at 8:24 AM

Thanks for that. Just keep Sandra posted today and you can keep me posted by email,

s.22(1)
s.22(1)

and really am only available for dire emergencies. Thanks Tadhg.

Apologies for that. Will work through Sandra

Delivered

Thanks very much.



iMessage



Major Incident Report

E-Comm Outage - March 16, 2024

Author:	Kyle Foster, Director of Infrastructure and Operations
Document Version:	1.0
Modification Date:	May 6, 2024
Document Status:	Final

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1 Incident Summary

Title:	March 16 E-Comm Outage	PRB Number:	PRB0041691
Date:	Saturday, March 16, 2024	Time:	2:07am

The City’s primary data centre (PDC) facility at E-Comm experienced an outage on the morning of Saturday, March 16.

The root cause of the outage was due to a failed chiller (an E-Comm 911 asset) and was exacerbated by additional factors including notifications not being noticed/monitored

resulting in lost response time, and a key identity authentication system not failing over to the secondary data center (SDC) as expected.

City technology systems and digital applications were largely unavailable to City staff and public from about 4am until noon, with the notable exception of e-mail, Microsoft Teams, OneDrive, Sharepoint Online, Cisco phone system and network connectivity.

The City's public facing website vancouver.ca was down for about 4 hours.

2 Impact Assessment

Severity Level: High

The severity of this outage was high. If the incident had occurred on a normal business day during the week it would have had a higher impact. The impact affected all City employees working that day as nearly all of the applications they rely upon to conduct their work were unavailable from an estimated 4am to about 10:30am - with most recovered by early afternoon.

Number of Users Affected:

- Public
 - Any public attempting to use City website or use the Van311 mobile app between approximately 4am and 8am
 - Any public attempting to call 3-1-1 between 7am and 10:30am
- City employees working that day (est. 4am-6am on a Saturday)
 - Est. 400 City employees working at this time, mainly:
 - Firefighters
 - Community Centre workers

2.1 Affected Systems and Services:

Most City technology systems and online applications were impacted by the data centre outage. The following is a list of what was **not** impacted:

- Power at E-Comm was unaffected
- Network connectivity to E-Comm was unaffected
- Internet connectivity was unaffected
- Cloud based applications the City uses were unaffected* including:
 - E-mail
 - SharePoint Online including Currents (City intranet)
 - Microsoft Teams
 - OneDrive
 - SuccessFactors
 - ServiceNow - Service Desk
 - Public facing ActiveNet website

** Identity authentication for cloud-based applications were at risk, but a work-around was available and used*

Any City application with a reliance on PDC was down and unavailable starting at about 4am, with most recovered by noon. The following is a list of some of the systems and applications impacted by the outage:

SAP	City's Enterprise Resource Planning (ERP) platform, supporting most Finance and HR activities
Content Manager "VanDocs"	City's Enterprise Records and Document Management System (ERDMS), stores most City records
EM Pro	311's case management system
GIS Systems	City's geospatial information platform
Vancouver.ca and Van311	City's public facing website and service request app
Posse	Permitting services
Hansen	Engineering asset management and work order management
Tempest	Utility billing, property tax and other payment services (e.g. parking ticket payments)
Amanda	Licensing services (business, dog, false alarm etc.)
M5 Fleet	Fleet management software
G-Techna	Parking Enforcement ticket issuing system
Fire Remote Desktop Services	Firehall terminals firefighters use to access multiple VF&RS applications

3 Incident Timeline

The outage for most systems and applications was from about 4am until 10:20am, with nearly all applications recovered by 4pm.

2:07am	Saturday	E-Comm chiller failed - s.15(1)(l) started heating up
4:00am		s.15(1)(l) shut down, VMs started failing soon after
6:15am		City Systems team becomes aware, starts calling others
7:00am		City and E-Comm personnel arrive onsite to start recovery
8:00am		E-Comm brings backup chiller on-line, room cooling accelerates
8:00am		On-prem identity system work around: all TS added to group that bypasses need for on-prem identity authentication
8:10am		s.15(1)(l) failover issue resolved, vancouver.ca brought back online
9:30am		s.15(1)(l) cool enough to power s.15(1)(l) back on
10:00am		s.15(1)(l) brought back up
10:20am		First server VMs restored, Systems working with Apps and DBS to restore all in sequence
10:30am		3-1-1 available
1:30pm		s.15(1)(l) VPN services recovered
5:30pm		Miki Shoji (Director, Enterprise Applications) asked Apps team to stand down, Kyle Foster (Director, Infrastructure & Operations) asked same of IO team
12:30pm		Sunday
All Day	Monday	City TS staff rebooted/restarted multiple servers, monitored all applications for recovery
Evening	Thursday	s.15(1)(l) was failed-back to, resulting in s.15(1)(l)

4 Root Cause Analysis

Root Cause Summary: Per the e-mail from Jerin Vekkal, Facilities Manager of the E-Comm facility:

“A faulty temperature sensor caused the main chiller to shut down unexpectedly. Additionally, the backup chiller system failed to activate, exacerbating the situation.”

Contributing Factors:

The following items exacerbated the impact of the incident:

- (E-Comm) the notifications sent by chiller, according to Jerin, “We received a critical alarm email for “E-Comm, Chiller1” at 2:07 AM. Unfortunately, it was missed due to its classification as a single-chime email.”
 - Result: lost response time
- E-mail notifications from s.15(1)(l) do not leverage automated phone calling or 24x7 monitoring.
 - Result: lost response time
- Configuration for s.15(1)(l) (resulting from s.15(1)(l)) was not synched to the s.15(1)(l) (human error)
 - Result: s.15(1)(l) causing team to address authentication issue resulting in slower response time
- s.15(1)(l) configuration did not result in SDC unit automatically taking over
 - Result: recovering vancouver.ca required manual remote intervention

5 Resolution and Mitigation

This section describes background and scope of the event, and a detailed explanation of recovery activities, unexpected failures and work arounds.

5.1 Background and Scope:

The City of Vancouver’s (the City) primary data centre (PDC) is located at the E-Comm facility, 3301 East Pender Street in Vancouver. E-Comm (the facility) is operated by a public sector organization (E-Comm 911). The City is a customer of E-Comm 911 and has s.15(1)(l) within the E-Comm facility, collectively these are the City’s PDC s.15(1)(l) s.15(1)(l) s.15(1)(l). Saturday’s outage affected the s.15(1)(l).

The City’s s.15(1)(l) contains storage, network, and server equipment that run multiple public facing and internal facing City systems, including: public website, network core switches and load balancers, the servers that underly s.15(1)(l) hypervisor system (which hosts hundreds of virtual servers (VMs)) which in turn relies on s.15(1)(l) (which are also in s.15(1)(l)), plus a number of other servers related to City systems. Those hundreds of VMs run the production versions of hundreds of databases and application systems.

Many applications and most databases are designed to automatically failover to the City’s secondary data center (SDC) - s.15(1)(l) less critical applications can be manually failed-over to the City’s SDC. Saturday’s outage benefited from this automatic failover in some instances but revealed some gaps in failover design in other instances (e.g.

vancouver.ca should not have failed but did due to an s.15(1)(l) s.15(1)(l).

Saturday's outage was caused by an E-Comm chiller failure, which failed at about 2am. This chiller and its backup chiller are owned, operated and monitored by the E-Comm organization. This chiller circulates and chills water, which in turn provides cooling to (two) Refrigeration Distribution Units (RDUs). The RDUs in turn provide cooling to refrigerant that is circulated to in-row cooling units within the data centre rooms. One of the affected RDUs is a City asset which provides cooled refrigerant to the s.15(1)(l) - the other RDU is an E-Comm asset (and thus E-Comm 911 services outage).

5.2 Description of Events:

At 2:07am, the E-Comm chiller failed, and the backup chiller did not automatically come online. As a result, s.15(1)(l) started providing less and less cooling; the City's s.15(1)(l) began to heat up. Automated e-mail notifications from the City's s.15(1)(l) s.15(1)(l) started coming in at about 3am, none of these alerts were configured to be sent via text or phone call, nor are they monitored by a 24x7 service; they went unnoticed.

Starting at about 4am, some equipment in s.15(1)(l) automatically powered down due to heat monitoring thresholds, most notably:

- s.15(1)(l) equipment (comprised of heat generating disk drives)
- s.15(1)(l) (which is effectively a server appliance)

At about 6:15am, a Technical Specialist from the City's Systems team checked his e-mail and saw the alert notifications. He immediately called his manager Francis Tan, Manager Systems, as well as key colleagues on the City's Systems team and the Network team. At about 6:30am Francis contacted Jerin Vekkal, Facilities Manager for the E-Comm facility (an E-Comm 911 employee) which was when E-Comm was first advised of the issue.

At about 6:40am Francis called Kyle Foster, Director Infrastructure & Operations (IO) who in turn notified Tadhg Healy, Chief Technology Officer, who handled communications to City leadership, Communications, 311 and relevant public sector persons including Darcy Wilson, Executive Director at E-Comm. Kyle took over responsibility for activating Technology Services personnel, including not only IO, but also Applications and Database Solutions staff.

City Systems personnel and E-Comm personnel began to arrive on site as early as about 7am to address the situation - which entailed opening data centre room doors and situating large fans outside the rooms to disperse the heat. Temperature in s.15(1)(l) got as high as 135 degrees Fahrenheit.

E-Comm brought the backup chiller online at about 8am. By about 9:30am, things were cool enough to start powering the equipment back up. The City's hypervisor s.15(1)(l) s.15(1)(l) was back up by about 10am.

Over the course of the next 4 hours the Systems team worked with City's Applications and Database personnel to recover applications in sequence, with most applications coming back online during this time.

Some of s.15(1)(l) equipment stayed powered up and working throughout the entire incident including all network switches and the City's s.15(1)(l).

5.3 Unanticipated Failures

Some key technology systems that were understood to be configured for High Availability (HA) - meaning they would seamlessly failover to SDC - did not failover, namely:

- Vancouver.ca relies upon the s.15(1)(l) s.15(1)(l) did not automatically take over causing vancouver.ca s.15(1)(l) s.15(1)(l) to go off-line until s.15(1)(l), s.15(1)(l) and vancouver.ca were brought back online - which was about 8:10am
- s.15(1)(l) - this was due to a recent (March 14) configuration change that had not been replicated to s.15(1)(l)

s.15(1)(l) an on-prem identity authentication system many of our systems rely on, namely:

- s.15(1)(l) - the City's VPN system that all users use to authenticate to the City's internal network relies s.15(1)(l) and was not recovered until 1:30pm, Saturday - though a work around was used (see below)
- s.15(1)(l) - the City's cloud-based identity authentication system s.15(1)(l) - though a work around was used (see below)
- City corporate Wi-Fi - the City's Wi-Fi network for City employees used by many laptop users in City office buildings relies s.15(1)(l) s.15(1)(l), and was not recovered until 12:30pm Sunday

5.4 Work Arounds

s.15(1)(l) An already in place work around existed (prior to the weekend) that allowed Systems specialists to bypass s.15(1)(l) by adding select user IDs to a s.15(1)(l) group.

Members in this group were/are able to authenticate purely to s.15(1)(l) s.15(1)(l) - the effect being these users could VPN to the City network and also use all cloud-based applications that s.15(1)(l) (e.g. e-mail, Teams, OneDrive, SharePoint Online including Currents). Technical Specialists in the Systems team added all TS users by about 8am and started adding additional City employees in the following hours - though stopped that work when s.15(1)(l) recovered at about 1:30pm.

6 Lessons Learned and Next Steps

6.1 Technical Learnings

This section outlines the technical gaps identified during the outage, and includes mitigation work to address these gaps.

1. Secure Password Storage Solution Failover:

- Issue: s.15(1)(l) high-availability configuration lacks failover redundancy beyond the primary datacenter (PDC).
- Mitigation Plan:

- Review and enhance the configuration to ensure failover capability across datacenters.
- Implement redundant password storage servers in both PDC and the SDC.
- Regularly test failover scenarios to verify seamless transition during outages.

2. Load Balancer Failover:

- Issue: s.15(1)(l) did not automatically failover due to unsynchronized configurations.
- Mitigation Plan:
 - Update load balancer configurations to ensure synchronization and failover readiness.
 - Conduct regular failover tests to validate proper functioning.
 - s.15(1)(l)

3. System Monitoring Notifications:

- Issue: Critical system notifications rely solely on email, risking oversight during non-work hours.
- Mitigation Plan:
 - Enhance monitoring by automating phone call notifications alongside emails.
 - Implement an alert escalation process to ensure timely response.
 - Train staff on monitoring best practices.

4. City Wi-Fi Network Outage:

- Issue: s.15(1)(l)
- Mitigation Plan:
 - s.15(1)(l)
 - Regularly test Wi-Fi availability during site outages.

5. Network Monitoring System Failover:

- Issue: s.15(1)(l) impacting network monitoring.
- Mitigation Plan:
 - s.15(1)(l)
 - Test failover procedures.

6. Critical Infrastructure SPOF:

- Issue: s.15(1)(l) [REDACTED]
- Mitigation Plan:
 - Redesign data center configuration to eliminate s.15(1)(l) [REDACTED].
 - s.15(1)(l) [REDACTED].

7. API Resilience Improvement:

- Issue: Outage affected APIs and applications.
- Mitigation Plan:
 - s.15(1)(l) [REDACTED]
 - Implement graceful handling of API service outages.
 - Monitor API health proactively.

8. Van311 App History/My Request Tab Stability:

- Issue: Users needed to log out and back in after the login API was restored.
- Mitigation Plan:
 - Enhance the stability of the History/My Request tab.
 - Investigate session management and improve user experience.

9. Remote Agents Connectivity:

- Issue: Remote 311 CSRs couldn't connect during the outage.
- Mitigation Plan:
 - Address network connectivity issues for remote agents.
 - Create callout lists for priority incidents during off-hours.

10. Service Impact Visibility:

- Issue: Lack of an accessible system status list during outages.
- Mitigation Plan:
 - Short-term: Ensure system status list in BCP includes service impact details.
 - Long-term: s.15(1)(l) [REDACTED] for comprehensive visibility.

11. Enterprise Service Management (ESM) System Outage:

- Issue: s.15(1)(l) [REDACTED] was affected during the outage.
- Mitigation Plan:
 - Review ESM configuration and failover readiness.
 - s.15(1)(l) [REDACTED].
 - Ensure ESM availability during single site outages.

6.2 Process and Communications Learnings

1. **Service Status Visibility:**
 - **Issue:** Lack of a single view for monitoring the status of all public and staff-facing digital services.
 - **Mitigation Plan:**
 - Implement a centralized dashboard or monitoring tool that aggregates service status information.
 - Regularly update and maintain this dashboard to reflect the real-time health status of each service.
 - Define clear thresholds for service availability and performance, triggering alerts when thresholds are breached.
 - Establish incident response procedures based on the dashboard alerts.
2. **Staff Contact Details and Callout Process:**
 - **Issue:** Inconsistent availability of contact details for internal staff and external partners.
 - **Mitigation Plan:**
 - Review and consolidate contact information for both internal staff and external partners.
 - Use a reliable communication platform (i.e., s.15(1)(l) to store and manage emergency contact details.
 - Regularly validate and update contact information to ensure accuracy.
 - Establish a callout process that includes predefined roles and responsibilities for contacting relevant personnel during incidents.
3. **Incident Reporting Procedures and Callouts:**
 - **Issue:** Lack of formalized incident reporting procedures.
 - **Mitigation Plan:**
 - Develop clear incident reporting guidelines and procedures.
 - Train staff on how to report incidents promptly and accurately.
 - Implement an incident management system to track and prioritize reported incidents.
 - Define escalation paths for critical incidents to ensure timely response.
4. **Incident Management and Communications:**
 - **Issue:** Inadequate communication during incidents.
 - **Mitigation Plan:**
 - Create email communication templates for different incident scenarios (e.g., service outages, security breaches).
 - Attach these templates to the Business Continuity Plan (BCP) for easy reference.
 - Conduct regular drills to practice using these templates during mock incidents.
 - Schedule frequent department-wide update calls to disseminate critical information and maintain alignment across teams.
5. **Liaisons for Incident Response Coordination:**

- **Issue:** Challenges in coordinating interactions between various groups during incident response.
 - **Mitigation Plan:**
 - Designate one or more liaisons responsible for collecting updates and notes from different teams.
 - These liaisons should consolidate information and disseminate it to relevant stakeholders.
 - Consider leveraging the Project Management Office (PMO) for this coordination role.
 - Foster collaboration and communication among liaisons to ensure effective incident response.
6. **Effective Use of Incident Response Teams Channel:**
- **Issue:** Underutilization of the incident response Teams channel.
 - **Mitigation Plan:**
 - Promote awareness of the Teams channel as the primary communication platform during incidents.
 - Encourage teams to actively share updates, collaborate, and seek assistance through this channel.
 - Provide training on effective use of Teams features (e.g., channels, threads) for incident-related discussions.

6.3 What Went Well

The March 16th outage did reveal some positive findings, which are listed here.

1. **Cloud-Based Services Availability:**
 - E-mail, Teams, OneDrive, and SharePoint Online remained accessible due to them being cloud-based.
 - Changes **s.15(1)(l)** are underway to address cached credentials issues.
2. **Exemplary Team Response:**
 - City employees responded swiftly, despite it being the first weekend of Spring Break.
3. **Effective Communication Channels:**
 - Collaborated with the Civic Engagement and Communications (CEC) for staff and public messaging.
 - Empowered decision-making by key personnel.
4. **Streamlined Communication via Teams:**
 - Leadership chat facilitated efficient communication and decision-making.
5. **Service Desk Priority and Restoration:**
 - Service Desk received high priority.
 - Phone service was promptly restored.
 - Email reception in ServiceNow aided ticket processing.
6. **Incident Response Coordination:**

- Rapidly engaged critical personnel for incident setup.
 - System restoration proceeded smoothly.
7. **Business Continuity Preparedness:**
- Recent Business Continuity Plan exercise (3 days prior) proved helpful.
8. **Responsive City Leadership:**
- City leadership communicated effectively with the City Leadership Team (CLT) and Mayor and Council

7 Communication and Escalation

7.1 Stakeholders Notified & Escalation

This section will contain a list of internal and external stakeholders contacted, and the sequence in which they were contacted.

Time	Stakeholder	Channel
8:21am	Karen Levitt (Deputy CM)	Phone call
8:47am	Sandra Singh (Deputy CM)	Phone call
9:01am	Laura Vajanto (CRO) Maria Pontikis (CCO)	Phone call
9:07am	Sandra Singh (Deputy CM)	Email
9:22am	City Leadership Team	Email
9:23am	Godfrey Tait (Communications Manager)	Phone call
9:38am	Kay Cahill (Director IT, VPL)	Phone call
9:58am	Mayor and Council	Email
10:18am	All City staff	Email
10:26am	Magnus Enfeldt (Chief Safety Officer)	Phone call
2:11pm	Technology Services managers	Email
2:17pm	Sandra Singh (Deputy CM)	Email
2:25pm	Mayor and Council	Email
6:51pm	Technology Services managers	Email
9:51pm	Mayor and Council	Email

From: Foster, Kyle
To: Darcy Wilson
Cc: Morzanta, Setal; Healy, Tadhg; Tan, Francis (IT Systems Manager); Neufeld, Gerry; Polano, David; Shoh, Mik
Subject: City contacts
Date: Saturday, March 16, 2024 4:53:40 PM

Hi Darcy,

While we can better formalize this in the near future, per our talk earlier, I provide the key contact details for City people to notify should knock on issues emerge this weekend. Please share with your "Firewatch" personnel.

Name	Org Unit	Position	Direct Manager	Work Site	Work Phone	Work Cell	Home Phone	Personal Cell	Personal Email
David Polano	Cybersecurity	Manager	Tadhg Healy	Richards	604-829-9341	s.15(1)(f)		s.22(1)	s.22(1)
Mik Shoh	TLT (Enterprise Applications & Integ)	Director	Tadhg Healy	Richards			s.22(1)		
Setal Morzanta	TLT (Digital Services Delivery)	Director	Tadhg Healy	Spyglass	604-873-7230				
Kyle Foster	TLT (Infrastructure & Operations)	Director	Tadhg Healy	Richards	604-829-4215	s.15(1)(f)			
Gerry Neufeld	Infrastructure & Operations	Senior Manager	Kyle Foster	Richards	604-873-7008				
Francis Tan	Infrastructure & Operations	Manager	Kyle Foster	Richards	604-873-7858				
Tadhg Healy	TLT	CTO	Karen Levitt	Richards	604-829-2047		s.22(1)		

Regards,

Kyle Foster (he/him)
 Director, Infrastructure & Operations
 Technology Services
 CITY OF VANCOUVER
 Email: kyle.foster@vancouver.ca
 Desk: 604.829.4215
 Mobile: s.15(1)(f)

I would like to acknowledge that we are on the Unceded Traditional territory of the x'məilw'aqam (Musqueam), seliwitsh (Tsilil'Wautsh) and s'gyuwú'mech (Squamish) Coast Salish Peoples.

From: "Healy, Tadhg" <Tadhg.Healy@vancouver.ca>

To: "All Staff (COV) - DL" s.15(1)(l)

Date: 3/16/2024 10:17:00 AM

Subject: CoV Online Services disruption - Saturday 16 March

Good morning everyone,

Please note that we are currently experiencing an outage of a range of our online services (both staff and public), including 311, service desk and public-facing services such as online parking payment and some licensing services. You may also notice that your VPN is also not working. The cause of the issue was an air conditioning failure early this morning at our primary data centre resulting in an unplanned shut down of a number of servers.

Staff are onsite working to restore services as quickly as possible with the aim of completing that process by this afternoon.

Should you receive questions from the public, you can refer them to our public website and to our social media for updates.

Regards,

Tadhg

Tadhg Healy (he/him) | Chief Technology Officer
Technology Services | City of Vancouver
tadhg.healy@vancouver.ca
604-829-2047

The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the x̱m̱ ḵ y̱ m̱ (Musqueam), S̱ w̱ w̱ ú̱ 7̱ mesh (Squamish), and s̱ ḻ iḻ w̱ ta̱ (Tseil-Waututh) Nations.

From: ["Tait, Godfrey" <Godfrey.Tait@vancouver.ca>](mailto:Godfrey.Tait@vancouver.ca)

To: ["Healy, Tadhg" <Tadhg.Healy@vancouver.ca>](mailto:Tadhg.Healy@vancouver.ca)

Date: 3/16/2024 10:29:52 AM

Subject: CoV Online services disruption - Saturday, March 16

Good morning everyone,

Please note that we are currently experiencing an outage of a range of our online services (both staff and public), including 311, service desk and public-facing services such as online parking payment and some licensing services. You may also notice that your VPN is also not working. The cause of the issue was an air conditioning failure early this morning at our primary data centre resulting in an unplanned shut down of a number of servers.

Staff are onsite working to restore services as quickly as possible with the aim of completing that process by this afternoon.

Should you receive questions from the public, you can refer them to our public website and to our social media for updates.

Regards,

Tadhg

Tadhg Healy (he/him) | Chief Technology Officer

Technology Services | City of Vancouver

tadhg.healy@vancouver.ca

604-829-2047

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From: "COV Broadcast Server" s.15(1)(l)

To: "All Staff (COV) - DL" s.15(1)(l)

Date: 3/16/2024 10:36:46 AM

Subject: CoV Online services disruption - Saturday, March 16

Good morning everyone,

Please note that we are currently experiencing an outage of a range of our online services (both staff and public), including 311, service desk and public-facing services such as online parking payment and some licensing services. You may also notice that your VPN is also not working. The cause of the issue was an air conditioning failure early this morning at our primary data centre resulting in an unplanned shut down of a number of servers.

Staff are onsite working to restore services as quickly as possible with the aim of completing that process by this afternoon.

Should you receive questions from the public, you can refer them to our public website and to our social media for updates.

Regards,

Tadhg

Tadhg Healy (he/him) | Chief Technology Officer
Technology Services | City of Vancouver
tadhg.healy@vancouver.ca
604-829-2047

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From: "Foster, Kyle" <kyle.foster@vancouver.ca>

To: "TS - All Staff - DL" s.15(1)(l)

Date: 3/16/2024 10:46:43 AM

Subject: Foster, Kyle shared "System Status Workbook" with you




Foster, Kyle invited you to access a file

Here's the document that Foster, Kyle shared with you.



System Status Workbook

 This invite will only work for you and people with existing access.

Open

Share



[Privacy Statement](#)



From: ["Singh, Sandra" <Sandra.Singh@vancouver.ca>](mailto:Sandra.Singh@vancouver.ca)
To: ["Healy, Tadhg" <Tadhg.Healy@vancouver.ca>](mailto:Tadhg.Healy@vancouver.ca)
Date: 3/16/2024 2:37:05 PM
Subject: FW: ECOMM data center incident update

I concur with Francie. You and your team have done incredible work today

From: Singh, Sandra
Sent: Saturday, March 16, 2024 2:36 PM
To: Connell, Francie <francie.connell@vancouver.ca>
Subject: RE: ECOMM data center incident update

Thanks Francie – all the work is Tadhg and team so will forward your appreciation to them!

From: Connell, Francie <francie.connell@vancouver.ca>
Sent: Saturday, March 16, 2024 2:33 PM
To: Singh, Sandra <Sandra.Singh@vancouver.ca>
Subject: Re: ECOMM data center incident update

This is much appreciated, Sandra.

Very diligent work on this event from Tadhg and the IT team.
Your updates have been really helpful.

Thank you!
Francie

From: Singh, Sandra <Sandra.Singh@vancouver.ca>
Sent: Saturday, March 16, 2024 2:20:52 PM
To: City Leadership Team - DL [s.15\(1\)\(l\)](#)
Cc: Healy, Tadhg <Tadhg.Healy@vancouver.ca>; Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Subject: FW: ECOMM data center incident update

Hello CLT,

Update from Tadhg.

Sandra

From: Healy, Tadhg <Tadhg.Healy@vancouver.ca>
Sent: Saturday, March 16, 2024 2:17 PM
To: Singh, Sandra <Sandra.Singh@vancouver.ca>
Cc: Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Subject: ECOMM data center incident update

Hi Sandra,

See below for an update on the ECOMM data center incident we are experiencing.

Issue Summary:

An AC unit failure at ECOMM this morning caused a significant outage at our primary data center. This resulted from the unplanned shutdown of a number of servers in turn impacting a large number of City online services, both internal and public facing.

Impact:

- 1) Many online services (staff and public) unavailable starting early morning on March 16

Steps Taken:

Technical teams from Technology Services have been working to restore air conditioning, restore infrastructure, databases and applications.

- 1) Many applications and services have now been successfully restored - examples include public website, civic theaters website 3-1-1, online ticket payments (parking, property tax, utility billing), internal service desk, permitting services, parking enforcement applications, SAP, VPN etc.
- 2) We have communicated internally and externally (on social media) advising staff and public of the outage and keeping them apprised of our progress in restoring service.

Planned Next Steps:

Teams will continue to work to restore services and applications in priority sequence.

Regards,

Tadhg

Tadhg Healy (he/him) | Chief Technology Officer

Technology Services | City of Vancouver

tadhg.healy@vancouver.ca

604-829-2047

The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the x m k y m (Musqueam), S wxwú7mesh (Squamish), and s lilw ta (Tseil-Waututh) Nations.

From: "[Singh, Sandra](mailto:Sandra.Singh@vancouver.ca)" <Sandra.Singh@vancouver.ca>
To: "[Healy, Tadhg](mailto:Tadhg.Healy@vancouver.ca)" <Tadhg.Healy@vancouver.ca>
"[Pontikis, Maria](mailto:Maria.Pontikis@vancouver.ca)" <Maria.Pontikis@vancouver.ca>
"[Tait, Godfrey](mailto:Godfrey.Tait@vancouver.ca)" <Godfrey.Tait@vancouver.ca>
Date: 3/16/2024 10:24:03 AM
Subject: FW: For the Board

From: Singh, Sandra
Sent: Saturday, March 16, 2024 10:00 AM
To: Jackson, Steve <Steve.Jackson@vancouver.ca>
Subject: For the Board
Importance: High

Good morning Commissioners,

We are currently experiencing an outage of a range of online services, including 311 and many public and staff facing online services. Please see further information below:

- The cause of this issue was an air conditioning failure early this morning at our primary data center in the ECOMM facility which caused many of our servers to shut down due to high temperatures.
- Secondary cooling equipment is now running, and the managed service restoration process is expected to take 3-4 hours.

If you are asked to comment, we ask that you consider referring media to media@vancouver.ca and responding to constituents with a brief message noting that you are aware of some temporary disruptions and refer them to the messaging on the public website and social media for updates.

If you have any questions, please do not hesitate to email me directly and I'll work with City colleagues to ensure a response to all Commissioners.

Best,

Steve

From: "Singh, Sandra" <Sandra.Singh@vancouver.ca>
To: "Healy, Tadhg" <Tadhg.Healy@vancouver.ca>
Date: 3/16/2024 10:23:48 AM
Subject: FW: Update: Temporary disruption of some City and ECOMM online services

From: Singh, Sandra <Sandra.Singh@vancouver.ca>
Sent: Saturday, March 16, 2024 9:58 AM
To: Direct to Mayor and Council - DL s.15(1)(l)
Cc: City Manager's Correspondence Group - DL s.15(1)(l)
Subject: Update: Temporary disruption of some City and ECOMM online services

Good morning Mayor and Council,

We are currently experiencing an outage of a range of online services, including 311 and many public and staff facing online services. Please see further information below:

- The cause of this issue was an air conditioning failure early this morning at our primary data center in the ECOMM facility which caused many of our servers to shut down due to high temperatures.
- Secondary cooling equipment is now running, and the managed service restoration process is expected to take 3-4 hours.
- Please note that this has also impacted ECOMM servers s.13(1). The ECOMM technology team is working on their own restoration.

If you are asked to comment, we ask that you consider referring media to media@vancouver.ca and responding to constituents with a brief message noting that you are aware of some temporary disruptions and refer them to the messaging on the public website and social media for updates.

If you have any questions, please do not hesitate to email me directly and I'll work with staff to ensure a response to all of M&C.

Best,

Sandra

Sandra Singh | Deputy City Manager
sandra.singh@vancouver.ca
Pronouns: she/her

Assistant: Stacey Crawford
Phone: 604-871-6135
E-mail: stacey.crawford@vancouver.ca
Pronouns: she/her

The City of Vancouver acknowledges the unceded homelands of the x'm k'y'm (Musqueam), S'wxwú7mesh (Squamish), and Sel'íl witulh (Tseil-Waututh) Nations.

From: "Healy, Tadhg" <Tadhg.Healy@vancouver.ca>
To: "Foster, Kyle" <kyle.foster@vancouver.ca>
"Neufeld, Gerry" <Gerry.Neufeld@vancouver.ca>
Date: 4/2/2024 4:17:26 PM
Subject: Fwd: Network

FYI

From: Bharati, Raj <raj.bharati@vancouver.ca>
Sent: Saturday, March 16, 2024 12:23:00 PM
To: Healy, Tadhg <Tadhg.Healy@vancouver.ca>
Cc: Tseng, Steve <Steve.Tseng@vancouver.ca>; Mallen, Mike <Mike.Mallen@vancouver.ca>; Black, Jennifer <jennifer.black@vancouver.ca>
Subject: Network

Hi Tad,

As discussed on phone, we are not able to disarm West Building on our Aurora System. Also, we cannot run transaction report. Other features are working such as programming access cards etc. Let us know if this is a network issue.

Thanks

Raj Bharati | Security Officer
CITY OF VANCOUVER | City Protective Services
453 W 12th Ave | Vancouver, BC, V5Y 1V4
Phone: 604-873-7157
raj.bharati@vancouver.ca



[Report incidents through the COV Currents, Security E-Reporting Web Page](#)

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From: ["Singh, Sandra" <Sandra.Singh@vancouver.ca>](mailto:Sandra.Singh@vancouver.ca)
To: ["Healy, Tadhg" <Tadhg.Healy@vancouver.ca>](mailto:Tadhg.Healy@vancouver.ca)
CC: ["Tait, Godfrey" <Godfrey.Tait@vancouver.ca>](mailto:Godfrey.Tait@vancouver.ca)
Date: 3/16/2024 2:20:20 PM
Subject: RE: ECOMM data center incident update

Thank you!

I'll send this as is to CLT and then use to create a briefer note to M&C.

Sandra

From: Healy, Tadhg <Tadhg.Healy@vancouver.ca>
Sent: Saturday, March 16, 2024 2:17 PM
To: Singh, Sandra <Sandra.Singh@vancouver.ca>
Cc: Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Subject: ECOMM data center incident update

Hi Sandra,

See below for an update on the ECOMM data center incident we are experiencing.

Issue Summary:

An AC unit failure at ECOMM this morning caused a significant outage at our primary data center. This resulted from the unplanned shutdown of a number of servers in turn impacting a large number of City online services, both internal and public facing.

Impact:

- 1) Many online services (staff and public) unavailable starting early morning on March 16

Steps Taken:

Technical teams from Technology Services have been working to restore air conditioning, restore infrastructure, databases and applications.

- 1) Many applications and services have now been successfully restored - examples include public website, civic theaters website 3-1-1, online ticket payments (parking, property tax, utility billing), internal service desk, permitting services, parking enforcement applications, SAP, VPN etc.
- 2) We have communicated internally and externally (on social media) advising staff and public of the outage and keeping them apprised of our progress in restoring service.

Planned Next Steps:

Teams will continue to work to restore services and applications in priority sequence.

Regards,

Tadhg

Tadhg Healy (he/him) | Chief Technology Officer
Technology Services | City of Vancouver
tadhg.healy@vancouver.ca
604-829-2047

The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the x m k y m (Musqueam), S w w i 7 mesh (Squamish), and s l i l w t a (Tseil-Waututh) Nations.

From: ["Tait, Godfrey" <Godfrey.Tait@vancouver.ca>](mailto:Godfrey.Tait@vancouver.ca)
To: ["Healy, Tadhg" <Tadhg.Healy@vancouver.ca>](mailto:Tadhg.Healy@vancouver.ca)
Date: 4/2/2024 4:17:26 PM
Subject: RE: sig

thanks

From: Healy, Tadhg <Tadhg.Healy@vancouver.ca>
Sent: Saturday, March 16, 2024 10:23 AM
To: Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Subject: sig

Tadhg Healy (he/him) | Chief Technology Officer
Technology Services | City of Vancouver
tadhg.healy@vancouver.ca
604-829-2047

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From: "Fry, Karen" <Karen.Fry@vancouver.ca>

To: "Healy, Tadhg" <Tadhg.Healy@vancouver.ca>

Date: 3/16/2024 1:42:11 PM

Subject: Re: Update: Temporary service disruption of some City online services

Ok that's good to hear. I'm thinking it was a bigger issue than originally reported. ECOMM dispatch is still out and everything is manual.

From: Healy, Tadhg <Tadhg.Healy@vancouver.ca>

Sent: Saturday, March 16, 2024 1:02:31 PM

To: Fry, Karen <Karen.Fry@vancouver.ca>

Cc: Singh, Sandra <Sandra.Singh@vancouver.ca>

Subject: Re: Update: Temporary service disruption of some City online services

Hi Karen

I don't have that information from ECOMM at the moment but can try to get it from Darcy Wilson. Many of our City services have been successfully restored at this point.

Regards

Tadhg

From: Fry, Karen <Karen.Fry@vancouver.ca>

Sent: Saturday, March 16, 2024 12:50:21 PM

To: Healy, Tadhg <Tadhg.Healy@vancouver.ca>

Cc: Singh, Sandra <Sandra.Singh@vancouver.ca>

Subject: Re: Update: Temporary service disruption of some City online services

Does ECOMM have an Estimated time when when will be up?

From: Healy, Tadhg <Tadhg.Healy@vancouver.ca>

Sent: Saturday, March 16, 2024 9:52:04 AM

To: Fry, Karen <Karen.Fry@vancouver.ca>; Singh, Sandra <Sandra.Singh@vancouver.ca>; Tait, Godfrey <Godfrey.Tait@vancouver.ca>; Palmer, Adam <adam.palmer@vpd.ca>; CHOW, Howard (VPD) <howard.chow@vpd.ca>

Subject: RE: Update: Temporary service disruption of some City online services

Copy that, just spoke with Darcy Wilson – he said they are experiencing issues with dispatch, email and other internal services.

Lmk if there is any way we can help.

Regards

Tadhg

From: Fry, Karen <Karen.Fry@vancouver.ca>

Sent: Saturday, March 16, 2024 9:49 AM

To: Singh, Sandra <Sandra.Singh@vancouver.ca>; Healy, Tadhg <Tadhg.Healy@vancouver.ca>; Tait, Godfrey

<Godfrey.Tait@vancouver.ca>; Palmer, Adam <adam.palmer@vpd.ca>; CHOW, Howard (VPD) <howard.chow@vpd.ca>

Subject: Re: Update: Temporary service disruption of some City online services

Our team is in contact with ECOMM, no worries Tadgh

From: Singh, Sandra <Sandra.Singh@vancouver.ca>
Sent: Saturday, March 16, 2024 9:46:49 AM
To: Fry, Karen <Karen.Fry@vancouver.ca>; Healy, Tadgh <Tadhg.Healy@vancouver.ca>; Tait, Godfrey <Godfrey.Tait@vancouver.ca>; Palmer, Adam <adam.palmer@vpd.ca>; CHOW, Howard (VPD) <howard.chow@vpd.ca>
Subject: RE: Update: Temporary service disruption of some City online services

Hi Karen – the servers that support emergency dispatch are ECOMM servers which are also affected because this is a shared data centre. Tadgh has advised that the ECOMM team is onsite and working on this. He will call their IT Director to recommend they advise you and VPD and to keep you updated if they have not already done so.

Sandra

From: Fry, Karen <Karen.Fry@vancouver.ca>
Sent: Saturday, March 16, 2024 9:37 AM
To: Singh, Sandra <Sandra.Singh@vancouver.ca>
Subject: Re: Update: Temporary service disruption of some City online services

This is affecting our dispatch of emergency incidents, for police/fire/ambulance.
We are on manual systems.

From: Singh, Sandra <Sandra.Singh@vancouver.ca>
Sent: Saturday, March 16, 2024 9:22:28 AM
To: City Leadership Team - DL s.15(1)(l)
Cc: Healy, Tadgh <Tadhg.Healy@vancouver.ca>; Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Subject: Update: Temporary service disruption of some City online services

Good morning CLT colleagues,

We are currently experiencing an outage of a range of online services, including 311 and many public and staff facing online services. Please see further information below:

- The cause of this issue was an air conditioning failure early this morning (~2:30am) at our primary data center in the ECOMM facility which caused many of our servers to shut down due to high temperatures.
- Tadgh is coordinating the response and staff are on site. Secondary cooling equipment is now running, and TS have teams working to restore services in a managed way.
- They expect this managed restore process to take 3-4 hours.
- CEC is supporting TS with public messaging on social media and vancouver.ca, and TS will be notifying affected internal business leads over the course of the morning.

We will send a message to M&C to advise them and, Steve, we will send the same info to you so you can advise the Board if you see fit.

Thank you,

Sandra

Sandra Singh | Deputy City Manager
sandra.singh@vancouver.ca
Pronouns: she/her

Assistant: Stacey Crawford
Phone: 604-871-6135
E-mail: stacey.crawford@vancouver.ca
Pronouns: she/her

The City of Vancouver acknowledges the unceded homelands of the x m k y m (Musqueam), S wxwú7mesh (Squamish), and Sel il witulh (Tseil-Waututh) Nations

From: ["Tait, Godfrey" <Godfrey.Tait@vancouver.ca>](mailto:Godfrey.Tait@vancouver.ca)
To: ["Healy, Tadhg" <Tadhg.Healy@vancouver.ca>](mailto:Tadhg.Healy@vancouver.ca)
CC: ["Singh, Sandra" <Sandra.Singh@vancouver.ca>](mailto:Sandra.Singh@vancouver.ca)
["Pontikis, Maria" <Maria.Pontikis@vancouver.ca>](mailto:Maria.Pontikis@vancouver.ca)

Date: 3/16/2024 10:13:14 AM

Subject: *DRAFT broadcast message* COV online services disruption

Hi Tadhg, here's the draft for the COV Broadcast message.

///

s.13(1)



Thanks,

Tadhg

From: "Healy, Tadhg" <Tadhg.Healy@vancouver.ca>
To: "Singh, Sandra" <Sandra.Singh@vancouver.ca>
Date: 3/16/2024 9:06:00 AM
Subject: ECOMM AC Failure - Initial Update

Hi Sandra,

As discussed we are currently experiencing an outage of a range of services including 311 and many public and staff facing online services. The cause of this issue was a air conditioning failure early this morning (~2:30am) at our primary data center in the ECOMM facility which caused many of our servers to shut down due to high temperatures.

Staff are on site and secondary cooling equipment is now running and we have teams working to restore services in a managed way.

We expect this process to take 3-4 hours.

CEC is supporting us with public messaging on social media and vancouver.ca and we will be notifying affected internal business leads over the course of the morning.

We have also notified the Chief Risk Officer and Chief Communications Officer.

Please let me know if you have any questions.

Regards,

Tadhg

Tadhg Healy (he/him) | Chief Technology Officer
Technology Services | City of Vancouver
tadhg.healy@vancouver.ca
604-829-2047

The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the x̱m̱ ḵ y̱ m̱ (Musqueam), S̱ w̱ w̱ u̱ 7̱ mesh (Squamish), and s̱ ḻ ḻ w̱ ṯ a̱ (Tseil-Waututh) Nations.

From: "Tseng, Steve" <Steve.Tseng@vancouver.ca>
To: "CPS- - City Wide Flash Report - DL" s.15(1)(l)
CC: Security s.15(1)(l) @vancouver.ca>
"Vanier Park Security" s.15(1)(l) @vancouver.ca>
Date: 3/16/2024 9:44:41 AM
Subject: Flash Report - Network Down - City-Wide - 16-Mar-2024

Operational Occurrence

Date: March 24th, 2024

Incident Update Time: 0940 hours

Site: City Wide - Network

City of Vancouver Business Affected: Yes

Incident Type: City Network Down

- No known impacts to physical security systems, but access card programming is unavailable
- Phone systems and internet are functioning
- As of 0940 hrs, I.T. Team has been able to restore systems parts at a time, but estimates that it may take 2 to 3 hours for full restoral for all systems for all City Sites.
- Updates to follow

Incident Lead: Raj Bharati

Contact Number:

From: "Singh, Sandra" <Sandra.Singh@vancouver.ca>
To: "Healy, Tadhg" <Tadhg.Healy@vancouver.ca>
"Tait, Godfrey" <Godfrey.Tait@vancouver.ca>
Date: 3/16/2024 9:58:55 AM
Subject: FW: Update: Temporary disruption of some City and ECOMM online services

From: Singh, Sandra
Sent: Saturday, March 16, 2024 9:58 AM
To: Direct to Mayor and Council - DL s.15(1)(l)
Cc: City Manager's Correspondence Group - DL s.15(1)(l)
Subject: Update: Temporary disruption of some City and ECOMM online services

Good morning Mayor and Council,

We are currently experiencing an outage of a range of online services, including 311 and many public and staff facing online services. Please see further information below:

- The cause of this issue was an air conditioning failure early this morning at our primary data center in the ECOMM facility which caused many of our servers to shut down due to high temperatures.
- Secondary cooling equipment is now running, and the managed service restoration process is expected to take 3-4 hours.
- Please note that this has also impacted ECOMM servers s.13(1). The ECOMM technology team is working on their own restoration.

If you are asked to comment, we ask that you consider referring media to media@vancouver.ca and responding to constituents with a brief message noting that you are aware of some temporary disruptions and refer them to the messaging on the public website and social media for updates.

If you have any questions, please do not hesitate to email me directly and I'll work with staff to ensure a response to all of M&C.

Best,

Sandra

Sandra Singh | Deputy City Manager
sandra.singh@vancouver.ca
Pronouns: she/her

Assistant: Stacey Crawford
Phone: 604-871-6135
E-mail: stacey.crawford@vancouver.ca
Pronouns: she/her

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From: ["Singh, Sandra" <Sandra.Singh@vancouver.ca>](mailto:Sandra.Singh@vancouver.ca)
To: ["Healy, Tadhg" <Tadhg.Healy@vancouver.ca>](mailto:Tadhg.Healy@vancouver.ca)
["Tait, Godfrey" <Godfrey.Tait@vancouver.ca>](mailto:Godfrey.Tait@vancouver.ca)
CC: ["Fry, Karen" <Karen.Fry@vancouver.ca>](mailto:Karen.Fry@vancouver.ca)
Date: 3/16/2024 9:42:02 AM
Subject: FW: Update: Temporary service disruption of some City online services

Thanks for updating Karen Tadhg and Godfrey – fyi below

S

From: Fry, Karen <Karen.Fry@vancouver.ca>
Sent: Saturday, March 16, 2024 9:37 AM
To: Singh, Sandra <Sandra.Singh@vancouver.ca>
Subject: Re: Update: Temporary service disruption of some City online services

This is affecting our dispatch of emergency incidents, for police/fire/ambulance.
We are on manual systems.

From: Singh, Sandra <Sandra.Singh@vancouver.ca>
Sent: Saturday, March 16, 2024 9:22:28 AM
To: City Leadership Team - DL [s.15\(1\)\(l\)](#)
Cc: Healy, Tadhg <Tadhg.Healy@vancouver.ca>; Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Subject: Update: Temporary service disruption of some City online services

Good morning CLT colleagues,

We are currently experiencing an outage of a range of online services, including 311 and many public and staff facing online services. Please see further information below:

- The cause of this issue was an air conditioning failure early this morning (~2:30am) at our primary data center in the ECOMM facility which caused many of our servers to shut down due to high temperatures.
- Tadhg is coordinating the response and staff are on site. Secondary cooling equipment is now running, and TS have teams working to restore services in a managed way.
- They expect this managed restore process to take 3-4 hours.
- CEC is supporting TS with public messaging on social media and vancouver.ca, and TS will be notifying affected internal business leads over the course of the morning.

We will send a message to M&C to advise them and, Steve, we will send the same info to you so you can advise the Board if you see fit.

Thank you,

Sandra

Sandra Singh | Deputy City Manager
sandra.singh@vancouver.ca
Pronouns: she/her

Assistant: Stacey Crawford
Phone: 604-871-6135
E-mail: stacey.crawford@vancouver.ca

Pronouns: she/her

The City of Vancouver acknowledges the unceded homelands of the x m k y m (Musqueam), S w w u 7 mesh (Squamish), and Sel il w itulh (Tseil-Waututh) Nations

From: "Singh, Sandra" <Sandra.Singh@vancouver.ca>
To: "Healy, Tadhg" <Tadhg.Healy@vancouver.ca>
CC: "Fry, Karen" <Karen.Fry@vancouver.ca>
Date: 3/16/2024 9:47:53 AM
Subject: FW: Update: Temporary service disruption of some City online services

Hi Tadgh,

Further to Karen's update – sorry am working backward through emails. Not terrible efficient

From: Fry, Karen <Karen.Fry@vancouver.ca>
Sent: Saturday, March 16, 2024 9:32 AM
To: Singh, Sandra <Sandra.Singh@vancouver.ca>
Subject: Re: Update: Temporary service disruption of some City online services

Thanks Sandra

Our fleet software is down as well. Good time to dust off our business continuity plans. Previously we've deployed our electric fans to circulate the air if needed. Let me know if they'd like assistance with something similar.

K

From: Singh, Sandra <Sandra.Singh@vancouver.ca>
Sent: Saturday, March 16, 2024 9:22:28 AM
To: City Leadership Team - DL s.15(1)(l)
Cc: Healy, Tadhg <Tadhg.Healy@vancouver.ca>; Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Subject: Update: Temporary service disruption of some City online services

Good morning CLT colleagues,

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We will send a message to M&C to advise them and, Steve, we will send the same info to you so you can advise the Board if you see fit.

Thank you,

Sandra

Sandra Singh | Deputy City Manager
sandra.singh@vancouver.ca
Pronouns: she/her

Assistant: Stacey Crawford
Phone: 604-871-6135
E-mail: stacey.crawford@vancouver.ca
Pronouns: she/her

The City of Vancouver acknowledges the unceded homelands of the x m k y m (Musqueam), S wxwú7mesh (Squamish), and Sel il witulh (Tseil-Waututh) Nations

From: "de Castell, Christina" <Christina.deCastell@vpl.ca>
To: "Pontikis, Maria" <Maria.Pontikis@vancouver.ca>
"Singh, Sandra" <Sandra.Singh@vancouver.ca>
"Tait, Godfrey" <Godfrey.Tait@vancouver.ca>
CC: "Healy, Tadhg" <Tadhg.Healy@vancouver.ca>
Date: 3/16/2024 10:03:18 AM
Subject: Re: [External] Re: Update: Temporary service disruption of some City online services

[BlackBerry Hub+ Inbox for Android](#)

From: Maria.Pontikis@vancouver.ca
Sent: March 16, 2024 9:33\u8239 a.m.
To: Sandra.Singh@vancouver.ca; Christina.deCastell@vpl.ca; Godfrey.Tait@vancouver.ca
Cc: Tadhg.Healy@vancouver.ca
Subject: [External] Re: Update: Temporary service disruption of some City online services

Christina, do your VPL staff get all-staff notes from the CMO?

We plan to circulate one this morning and will cc you, should you need to share with or customize for the VPL team.

Maria

From: Singh, Sandra <Sandra.Singh@vancouver.ca>
Sent: Saturday, March 16, 2024 9:22 AM
To: City Leadership Team - DL s.15(1)(l)
Cc: Healy, Tadhg <Tadhg.Healy@vancouver.ca>; Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Subject: Update: Temporary service disruption of some City online services

Good morning CLT colleagues,

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Thank you,

Sandra

Sandra Singh | Deputy City Manager

sandra.singh@vancouver.ca

Pronouns: she/her

Assistant: Stacey Crawford

Phone: 604-871-6135

E-mail: stacey.crawford@vancouver.ca

Pronouns: she/her

The City of Vancouver acknowledges the unceded homelands of the x m k y m (Musqueam), S w x w i 7 mesh (Squamish), and Sel il w i t u l t h (Tseil-Waututh) Nations

From: ["Singh, Sandra" <Sandra.Singh@vancouver.ca>](mailto:Sandra.Singh@vancouver.ca)
To: ["Healy, Tadhg" <Tadhg.Healy@vancouver.ca>](mailto:Tadhg.Healy@vancouver.ca)
["Tait, Godfrey" <Godfrey.Tait@vancouver.ca>](mailto:Godfrey.Tait@vancouver.ca)
CC: ["Pontikis, Maria" <Maria.Pontikis@vancouver.ca>](mailto:Maria.Pontikis@vancouver.ca)
Date: 3/16/2024 9:53:47 AM
Subject: RE: Draft message for M&C

s.13(1)

From: Singh, Sandra
Sent: Saturday, March 16, 2024 9:53 AM
To: Healy, Tadhg <Tadhg.Healy@vancouver.ca>; Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Cc: Pontikis, Maria <Maria.Pontikis@vancouver.ca>
Subject: RE: Draft message for M&C
Importance: High

Hi both,

s.13(1)

Concerns?

I see Maria is online, so looping her in.

S

From: Healy, Tadhg <Tadhg.Healy@vancouver.ca>
Sent: Saturday, March 16, 2024 9:35 AM
To: Singh, Sandra <Sandra.Singh@vancouver.ca>; Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Subject: RE: Draft message for M&C

looks good to me
-t

From: Singh, Sandra <Sandra.Singh@vancouver.ca>
Sent: Saturday, March 16, 2024 9:32 AM
To: Tait, Godfrey <Godfrey.Tait@vancouver.ca>; Healy, Tadhg <Tadhg.Healy@vancouver.ca>
Subject: Draft message for M&C
Importance: High

Hi Tadhg and Godfrey – pls see below for proposed message to M&C and Commissioners.

S

s.13(1)

s.13(1)



Best,

Sandra

From: "[Singh, Sandra](mailto:Sandra.Singh@vancouver.ca)" <Sandra.Singh@vancouver.ca>
To: "[Tait, Godfrey](mailto:Godfrey.Tait@vancouver.ca)" <Godfrey.Tait@vancouver.ca>
"[Healy, Tadhg](mailto:Tadhg.Healy@vancouver.ca)" <Tadhg.Healy@vancouver.ca>
Date: 3/16/2024 9:41:21 AM
Subject: RE: Draft message for M&C

Great – thanks – will send now

From: Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Sent: Saturday, March 16, 2024 9:37 AM
To: Healy, Tadhg <Tadhg.Healy@vancouver.ca>; Singh, Sandra <Sandra.Singh@vancouver.ca>
Subject: RE: Draft message for M&C

This looks great. Many thanks. I will build off this for the post on social and for the COV Broadcast message.

Godfrey

From: Healy, Tadhg <Tadhg.Healy@vancouver.ca>
Sent: Saturday, March 16, 2024 9:35 AM
To: Singh, Sandra <Sandra.Singh@vancouver.ca>; Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Subject: RE: Draft message for M&C

looks good to me
-t

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Sent: Saturday, March 16, 2024 9:32 AM
To: Tait, Godfrey <Godfrey.Tait@vancouver.ca>; Healy, Tadhg <Tadhg.Healy@vancouver.ca>
Subject: Draft message for M&C
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S

s.13(1)



s.13(1)

Best,

Sandra

From: ["Singh, Sandra" <Sandra.Singh@vancouver.ca>](mailto:Sandra.Singh@vancouver.ca)
To: ["Healy, Tadhg" <Tadhg.Healy@vancouver.ca>](mailto:Tadhg.Healy@vancouver.ca)
["Tait, Godfrey" <Godfrey.Tait@vancouver.ca>](mailto:Godfrey.Tait@vancouver.ca)
CC: ["Pontikis, Maria" <Maria.Pontikis@vancouver.ca>](mailto:Maria.Pontikis@vancouver.ca)
Date: 3/16/2024 9:54:22 AM
Subject: RE: Draft message for M&C

Great, thanks for confirming!

From: Healy, Tadhg <Tadhg.Healy@vancouver.ca>
Sent: Saturday, March 16, 2024 9:54 AM
To: Singh, Sandra <Sandra.Singh@vancouver.ca>; Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Cc: Pontikis, Maria <Maria.Pontikis@vancouver.ca>
Subject: RE: Draft message for M&C

No concerns – that is accurate
-t

From: Singh, Sandra <Sandra.Singh@vancouver.ca>
Sent: Saturday, March 16, 2024 9:53 AM
To: Healy, Tadhg <Tadhg.Healy@vancouver.ca>; Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Cc: Pontikis, Maria <Maria.Pontikis@vancouver.ca>
Subject: RE: Draft message for M&C
Importance: High

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Sent: Saturday, March 16, 2024 9:35 AM
To: Singh, Sandra <Sandra.Singh@vancouver.ca>; Tait, Godfrey <Godfrey.Tait@vancouver.ca>
Subject: RE: Draft message for M&C

looks good to me
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From: Singh, Sandra <Sandra.Singh@vancouver.ca>
Sent: Saturday, March 16, 2024 9:32 AM
To: Tait, Godfrey <Godfrey.Tait@vancouver.ca>; Healy, Tadhg <Tadhg.Healy@vancouver.ca>
Subject: Draft message for M&C
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S

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Best,

Sandra