



Ref	Post Office Limited:	FJ: MI 5236253
Control	Version: 1.0	Status: Initial
Owner	Mike Woolgar	

## MAJOR INCIDENT REPORT

INCIDENT DETAILS		
<b>Incident Summary</b>	We experienced performance issues as a result of security patching to the Virtual Private Network (VPN)	
<b>Service Impacted</b>	At any one time, the incident affected an average of 1,200 counters (out of approximately 30,000 in the estate) Horizon Online counter positions. The impact gradually reduced as the packages were regressed and was completely resolved by 11:57.	
<b>Analysis of Problem</b>	There is an ongoing investigation into the security patches.	
<b>Root Cause Analysis</b>	To be confirmed	
<b>Corrective Actions</b>	In order to restore service, the packages were regressed on the IRE19 VSD servers (which host the IRE19 VPX servers). The IRE11 VPX servers were taken offline to force the VPN traffic through IRE19.	
<b>Date Of Incident</b>		<b>Time of Service Outage</b>
2/4/2012	08:00 hrs	11.57 hrs
TIME SERVICE RESTORED		

RELATED REFERENCES		
<b>Master Incident</b>	<b>Problem Record</b>	<b>No of Linked Incidents</b>
Tfs 5236253	TBC.	503 calls logged.
<b>Previous Occurrence</b>	<b>MTTR</b>	<b>Action required to Close</b>
None	N/A	See Actions below.



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### INCIDENT TIMELINE

Date	Time	Activity
2/4/2012	07:00	Network Node Manager (NNM) reported 450 gateway counters offline. SMC confirmed to the Post Office Account Out Of Hours Duty Manager that most of these were health checking.
	07:46	NNM Branch Ping Results reported an average of 452 gateway counters offline, although Tivoli health checking was still showing the majority were successful.
	08:03	Post Master from FAD 315217 logs a call stating 'Reference Data is being updated and may take up to 30 minutes.'
	08:16	10 Post Masters had logged calls in connection with the same problem Call made to advise POSD Out of Hours Duty Manager and also Post Office Account Out of Hours Duty Manager
	08:19	Post Office Account Out of Hours Duty Manager calls a Post Office Account Technical Bridge that commenced at 08:30.
	08:46	The Networks Team began performing traces of failing branch traffic through VPN Servers. Also Windows Team began systematically health checking all 24 VPX and all 8 VSD servers.
	08:55	NNM Branch Ping Results showed an average of 479 gateway counters offline.
	09:10	Fault found within VPN layer and restarted VPN services on VPX servers 2, 6 and 10 (all on VSD 2) as Networks Team indicated several sites were having problem with these VPX servers. It was agreed to take these VPX servers offline in a staggered manner.
	09:17	VPX server 10 (on VSD 2) was taken offline.
	09:25	VPX server 2 and 6 (on VSD 2) was taken offline.
		NNM Branch Ping Results showed an average of 303 gateway counters offline.
	09:31	Windows team continued health checking the remaining 21 VPX servers.
	09:50	Evaluation of evidence and technical options continued
	10:15	The Technical Bridge agreed all options had been exhausted and all relevant attendees agreed to regress packages from IRE19 and remove IRE11 servers from VPN farm.
	10:20	Regression of packages and reboot of VSD2 (IRE19) starts. It was agreed to do 1 of the 4 servers in IRE19 first to prove the regression method.
	10:52	VSD2 (IRE19) regression and health check complete.
	10:57	NNM Branch Ping Results showed an average of 325 gateway counters offline. As the BAL server monitors continued to improve (as branches were collecting their reference data) the technical bridge decided to proceed with the remaining 3 servers in a staggered manner.
	11:00	Regression of packages and reboot of VSD4 (IRE19) starts.
	11:04	Regression of packages and reboot of VSD6 (IRE19) starts.
	11:07	Regression of packages and reboot of VSD8 (IRE19) starts.
	11:25	VSD4 (IRE19) regression and health check complete
	11:36	VSD6 (IRE19) regression and health check complete.
	11:30	Horizon Service Desk report that there are no longer any telephone calls waiting.



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**INCIDENT TIMELINE**

Date	Time	Activity
	11:37	VSD8 (IRE19) regression and health check complete.
	11:38	Shutdown of VPX servers running on VSD1 (IRE11).
	11:42	Shutdown of VPX servers running on VSD3 (IRE11).
	11:46	Shutdown of VPX servers running on VSD5 (IRE11).
	11:50	NNM Branch Ping Results showed an average of 177 gateway counters offline.
	11:52	Shutdown of VPX servers running on VSD7 (IRE11).
	11:54	Windows team confirmed VPX servers in IRE11 all offline.
	11:57	Networks team confirmed VPN layer in IRE11 all no longer advertising routes. Horizon Service Desk report that there are no telephone calls waiting.
	12:00	NNM Branch Ping Results showed an average of 125 gateway counters offline. Post Office Ltd kept updated at 30 minute intervals until 14:49.

**IMPACT OF INCIDENT**

<b>Overview of Service Impact</b>	Due to an issue following security patching to Windows Servers, an average of 1,200 counters were unable to perform online services.
<b>Overview of Business Impact</b>	See graphs at end of report.

**SCALE OF IMPACT**

Timeline	No. Branches	No. C'trs	Files	X'ctions	HSD Calls	Other
T + 0m	N/A	1200	N/A	See below	503	N/A

**ACTIONS**

Actions	Owner	Target Date	Comments / Updates	Peak
Additional customer communication and service bridges throughout the day of 2/4/2012	G Welsh	2/4/2012	Complete 2/4/2012	N/A
SSC to provide M Jarosz (Network CSA) with requested log file information across all VPN related servers for analysis.	S Parker	2/4/2012	Complete 2/4/2012	PC0217089
Release Management to put all future server patching to live service on hold, pending the outcome of the actions below.	A Flack	2/4/2012	Complete 2/4/2012	N/A



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<b>ACTIONS</b>				
<b>Actions</b>	<b>Owner</b>	<b>Target Date</b>	<b>Comments / Updates</b>	<b>Peak</b>
Release Management to create a plan to regress these packages from all servers overnight. The plan needs to consider Batch Schedule times and VPN Layer testing. To be presented at special Post Office Limited CAB meeting at 18:00 on 2/4/2012. Internal checkpoints held at 20:00 and 21:15.	A Flack	3/4/2012	Complete 2/4/2012 (>2 hours early)	MSC 339893
Convene a technical bridge at 07:30 on 3/4/2012 to monitor the start of day with all the key teams.	A Parker	3/4/2012	Complete 3/4/2012	N/A
Arrange a formal Post Incident Review for 3/4/2012 to review draft MI report and determine any additional actions.	M Woolgar	3/4/2012	Complete 3/4/2012	N/A
Review of patch assessment process.	D Munro	20/4/2012	Ongoing	N/A
Platform architect to work with Release Management to re-validate the deployment groups to support the action below.	J Clark	18/4/2012	Ongoing	N/A
Fujitsu to review their processes to split resilient platform instances of the same type in a single change window, where appropriate.	T Atkinson	27/4/2012	Ongoing	N/A
Overnight Duty Managers to raise a formal technical bridge if an NNM threshold breach out of hours exceeds one hour duration.	S Bansal	18/4/2012	Ongoing	N/A
Raise a call with Fujitsu Microsoft support to review why the packages caused the incident.	J Clark	12/4/2012	Ongoing	N/A
Determine the requirement for additional testing and decide if they are going to be suitable for deployment in future.	H Pritchard	12/4/2012	Ongoing	N/A
Windows Team to raise new peak to investigate the time taken to reboot the VSD servers. Platform architect to progress.	J Clark	27/4/2012	Ongoing	TBC

<b>CLOSURE</b>		
<b>CP / OCP / CT / CR References</b>	<b>Details of Fix Applied</b>	<b>Comments / Updates</b>
<b>Date Closed</b>	<b>Fujitsu Approval</b>	<b>Post Office Limited Approval</b>

# Fujitsu

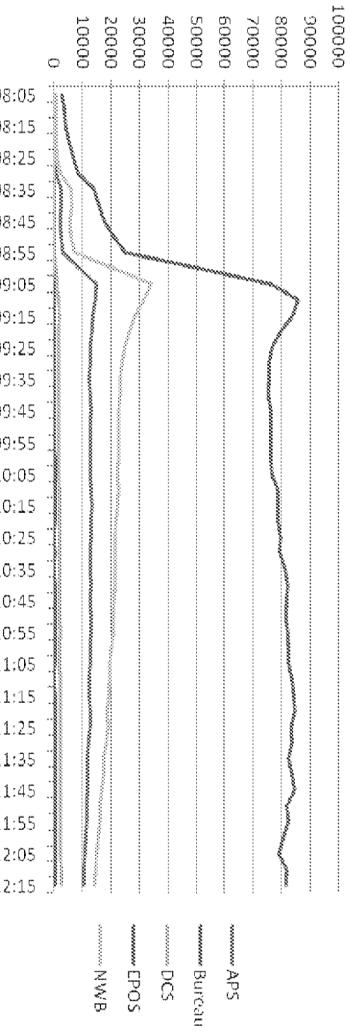
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## PRE-INCIDENT TIMELINE

Date	Time	Activity
1/4/2012	07:40	NNM Branch Ping Results showed an average of 892 gateway counters offline. After contacting Windows team it was suspected that these were being caused by MSC 333244 that was in progress in order to do Windows patching.
	11:33	NNM Branch Ping Results showed an average of 1193 gateway counters offline. As MSC 333244 was now complete, SMC escalated to the Post Office Account Out of Hours Duty Manager. Call routed to Core ISP as per normal process. Checks confirmed there was no problem with the branch network ADSL connections.
	16:45	Random sites from the NNM report were Tivoli health checked successfully. This result added further weight to the fault being a NNM reporting problem. TFS 5232217 routed to NOSS Team to resolve the NNM reporting problem.
	18:35	Post Office Account Out of Hours Duty Manager escalated this information to the POSD Out of Hours Duty Manager.
	19:00	Post Office Account Out of Hours Duty Manager called an internal conference call to discuss the problem.
	20:35	Internal conference call reconvened, however the NNM Branch Ping Results showed an average of 452 gateway counters offline.
	21:45	Internal conference call reconvened. Post Office Account Out of Hours Duty Manager requested SMC to manually health check more failing sites. Internal conference call reconvened. Following the request at 20:35, SMC confirmed that approximately 70% of failing sites were manually health checking, therefore taking the failing sites under threshold. These results suggested it was a reporting issue.

### 1) Transaction volume charts – with comparison to previous Monday



Note: The NWB (network banking) line is NWB and ETU (electronic top ups), and includes all transactions, including any where authorisation failed for any reason (including counter timeout). As before, we can only provide the numbers that exclude failed authorisations when the amalgamation into capacity figures has occurred later in the week.

**Fujitsu**

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2) Number of unique Branches that performed an EPOSS Transaction in 10 min intervals during period of incident

