

Report to: **Overview and Scrutiny Panel**
Date: **11 July 2019**
Title: **ICT Resilience Update**
Portfolio Area: **Support Services – Councillor N Hopwood**

Wards Affected: **All**

Urgent Decision: **N** Approval and clearance obtained: **Y**

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Recommendation:

- 1. That the Panel note the progress made to date in maintaining resilient IT systems and networks since June 2018**

1. Executive summary

- 1.1 Resilient IT systems are critical to the Council in delivering its services and to enabling its staff to work in an agile way. It is the service that enables all officers and Members access to information and communications tools.
- 1.2 Maintaining resilient systems is the responsibility of the IT Community of Practice, supported by the IT Service Desk (where issues are captured when reported)
- 1.3 An update was previously provided to the Panel in June 2018 with a resolution that a further update be provided in twelve months' time.
- 1.4 This report is an update on both the work completed and currently planned which serves to further improve the resilience of the IT service and availability times.
- 1.5 Good progress has been made so far with further actions planned as set out in this report.

2. Background

- 2.1 The IT Community of Practice is responsible for delivery and availability all back office software, email, Skype and telephony, networking, connectivity, remote access and security.
- 2.2 The previous IT (*28 June 2018 O&S7/18*) resilience report detailed the following work as "in progress".
 - 2.2.1 New Internet link to Kilworthy Park (West Devon Borough Council head office) which would allow continuity of access and telephony in the event that Follaton House loses Internet connectivity.
 - 2.2.2 The specification and purchase of new, more fault tolerant core network switches (devices which push data around our network) to replace current aging equipment.
 - 2.2.3 Commissioning of new web filtering system to protect internet users from malicious sites.
- 2.3 The following work was detailed as "planned"
 - 2.3.1 Following a period of evaluation and consultation, the migration of members email to cloud hosted Microsoft Office365 allowing more freedom of access without compromising security.
 - 2.3.2 The implementation of an application architecture refresh for the Civica Software to improve response speed and availability.
 - 2.3.3 Following the successful response to the severe weather, we will ensure that procedures are in place so that the Council is continuously ready to respond in a similar way whenever officer access to Follaton House or Kilworthy Park are compromised, with office systems and telephony uninterrupted.
 - 2.3.4 Conduct a Business Continuity rehearsal to ensure the requirements of the Organisational Business Continuity Plan are met.

3 Outcomes/outputs

Progress to date is as follows

- 3.1 The new Internet link was successfully commissioned giving speeds of 0.5 GB/sec – This enables us to replicate data backups to Kilworthy Park every 2 hours.
- 3.2 In all, 26 core network switches have been replaced with new more fault tolerant devices and there have been no network issues since. Other configuration changes have also improved speed and reliability.
- 3.3 The new web filtering software was successfully commissioned.

- 3.4 Implementation of the new Civica load balanced platform architecture is partially complete and it is planned to finish this work by the end of August 2019.
- 3.5 Given the organisation's dependence on remote access to deliver services, an order was placed in June 2019 to purchase an additional Pulse Secure remote access appliance which can be utilised as both a test device and a live failover in the event of a fault developing in one of the existing pair of devices. This will help to mitigate against the issues recently experienced where the Pulse system occasionally failed on computers. More detail on this is set out in the report to Panel on 13 June 2019 (Agenda Item 9)
- 3.6 The Microsoft Office 365 programme was temporarily halted due to staffing resources being prioritised to build a new Intranet platform then migrate existing content and train content authors.
- 3.7 Business continuity rehearsals have been conducted with systems and data successfully being restored to facilities in Kilworthy Park, but the exercise has highlighted the need for additional hardware at the site to deliver an acceptable level of performance.
- 3.8 Further work is required to ensure the requirements of the business are met and system recovery times are agreed.

Additional work in progress or completed

- 3.9 In addition to the work proposed in the last report, the following work further provides additional reassurance, enhances the resilience of the IT service.
- 3.10 The IT CoP regularly publicises the risk Malware poses to the organisation, provides information and training on how to identify it, and tests officers' level of knowledge by delivering face to face training, sending out educational emails and phishing tests.
- 3.11 We have installed and are currently configuring a new network storage device to replace the existing aging file storage device which hosts staff files and data.
- 3.12 Currently upgrading Exchange server and Exchange architecture to improve maintenance and recovery times. This also prepares for migration to Office 365 when required.
- 3.13 Regular IT health checks are undertaken which are conducted by accredited external companies. These are annually commissioned standards tests of system security, designed to assess our suitability for connection to government networks.
- 3.14 We received a "Good Standard" in the Cyber Security Report from Devon Audit Partnership
- 3.15 Increased speed of internet connection from 100Mb to 1GB allowing greater connection capability.

Current Performance

- 3.16 The IT COP maintains statistics around network and application availability. Appendix A shows a selection of server uptime statistics for main business systems. Server uptime is considered to be very good. The downtime included in the reports includes that which occurs as a result of planned, out of hours or overnight down time
- 3.17 When officers report issues which are affecting their productivity, it is generally a client application issue which we address by ensuring we are continuously testing and deploying current releases of applications such as W2 and APP

4 Options available and consideration of risk.

- 4.1 The programme of improvements above contributes to reducing the risk of service interruption and to ensure the solutions meet the requirement of the Councils business continuity plan.
- 4.2 Where risks are identified, they will be entered in the corporate risk register for consideration.

5 Proposed Way Forward

- 5.1 To continuously work towards reducing risk to business continuity by researching and implementing hardware, software and process improvements.

6. Implications

Implications	Relevant to proposals Y/N	Details and proposed measures to address
Legal/Governance	N	
Financial	N	
Risk	N	
Comprehensive Impact Assessment Implications		
Equality and Diversity	N	None
Safeguarding	N	None

Community Safety, Crime and Disorder	N	None
Health, Safety and Wellbeing	N	None
Other implications	N	None

Supporting Information

Overview and Scrutiny Panel Agenda Item 9 13 June 2019 – “IT System Update”



Overview and Scrutiny Panel O&S7/18 28 June 2018

Approval and clearance of report

Process checklist	Completed
Portfolio Holder briefed	Yes
SLT Rep briefed	Yes
Relevant Exec Director sign off (draft)	Yes
Data protection issues considered	Yes
If exempt information, public (part 1) report also drafted. (Cabinet/Scrutiny)	Not Applicable



IT Resilience – Appendix A

Report for Check Planning Portal

Report Time Span:	01/12/2018 00:00:00 - 25/06/2019 00:00:00		
Sensor Type:	HTTP Advanced (5 m Interval)		
Probe, Group, Device:	Follaton probe > Servers > swfvchubweb1.swdevon.lan		
Uptime Stats:	Up:	99.394 % 	[203d 07h 26m 36s]
Request Stats:	Good:	98.993 % 	[58499]
Average (Loading time):	2,325 msec		



Shows the health of Civica W2 servers by retrieving a document.

Report for App Pool Civica APP Live

Report Time Span:	01/12/2018 00:00:00 - 27/06/2019 13:34:00		
Sensor Type:	PerfCounter IIS Application Pool (5 m Interval)		
Probe, Group, Device:	SWFPRTG3 > Servers > swfvcaas1 [Civica APP application server]		
Uptime Stats:	Up:	99.263 % 	[98d 19h 36m 51s]
Request Stats:	Good:	98.498 % 	[42900]
Average (Application Pool State):	100 %		

Civica APP application up time

Report for Skype Services Group

Report Time Span:	01/12/2018 00:00:00 - 25/06/2019 00:00:00		
Sensor Type:	Business Process (180 s Interval)		
Probe, Group, Device:	Follaton probe > Group Sensors > Group Check Sensors		
Uptime Stats:	Up:	95.806 % 	[196d 00h 17m 08s]
Request Stats:	Good:	95.446 % 	[93801]
Average (Skype Services):	95 %		


All servers in the Skype group

Report for Service: OracleServiceRBLIVE



Report Time Span:	01/12/2018 00:00:00 - 27/06/2019 13:56:00		
Sensor Type:	WMI Service (180 s Interval)		
Probe, Group, Device:	Follaton probe > Servers > swfvrb1[SH RevBens Oracle]		
Uptime Stats:	Up:	94 % 	[194d 04h 34m 32s]
Request Stats:	Good:	93 % 	[92706]
Average (Sensor Execution Time):	391 msec		

Northgate Revs and Benefits. Down time is between 2:00 am and 4:00 am each night for backing up databases.

Report for Civica Financials Web Access (SHDC)

Report Time Span:	01/12/2018 00:00:00 - 27/06/2019 14:46:00		
Sensor Type:	HTTP (180 s Interval)		
Probe, Group, Device:	Follaton probe > Servers > swfvfms2 [Finance SHDC Apps]		
Uptime Stats:	Up:	99.999 % 	[207d 07h 12m 03s]
Request Stats:	Good:	99.986 % 	[99483]
Average (Loading time):	33 msec		

Report for Email Flow

Report Time Span:	01/12/2018 00:00:00 - 26/06/2019 08:22:00		
Sensor Type:	SMTP&IMAP Round Trip (1 h Interval)		
Probe, Group, Device:	SWFPRTG3 > Servers > swfvex2.swdevon.lan [Windows Webserver]		
Uptime Stats:	Up:	99.636 % 	[60d 23h 18m 49s]
Request Stats:	Good:	92 % 	[1471]
Average (Total):	32,376 msec		

Measures the ability of the mail system to send and receive emails.