Executive Summary

Downtime of business-critical email services costs organizations money. Even the migration to cloud-based email services doesn't mean that organizations won't experience outages in their email services despite offloading the underlying infrastructure, patching, and configuration management. In fact, these services do experience outages from time to time with the impact and cost of an outage largely borne by customers of the cloud-based email services provider. All of this means that organizations need a “Plan B” for mitigating the risk associated with the downtime of email.

Email continuity services available with FortiMail Cloud represent an effective way to mitigate the risk and cost associated with unplanned outages of core email services. Email continuity services offer a low-cost solution to keep employees productive, with the service often paying for itself several times over after even the first experienced outage.

Calculating the cost of downtime

According to Data Foundry, organizations can estimate the cost of downtime using a straightforward formula:4

\[
\text{Productivity Cost} = E \times \% \times C \times H
\]

Where E equals the number of employees affected, % equals the percent of their productivity impacted, C equals the average cost of an employee per hour, and H equals the length of the disruption or outage in hours. Using this formula for three different sized organizations, assuming employees spend 25% of their time engaging in email (reading, writing) and applying a $75,000 average cost for employees, we can see the respective cost of a three-hour outage on productivity.

<table>
<thead>
<tr>
<th>Sign</th>
<th>Formula description</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td># of employees</td>
<td>250</td>
<td>2,500</td>
<td>10,000</td>
</tr>
<tr>
<td>%</td>
<td>25% of their working productivity</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>C</td>
<td>$75,000/2,080 hours = $36 per hour</td>
<td>$36</td>
<td>$36</td>
<td>$36</td>
</tr>
<tr>
<td>H</td>
<td>3 hours</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Productivity cost (one outage)</td>
<td>$6,750</td>
<td>$67,500</td>
<td>$270,000</td>
</tr>
</tbody>
</table>

Outages Do Happen

In a three-week period in 2020, Microsoft 365 experienced three separate outages affecting service availability for customers.1 In March 2021, Microsoft 365 services were down for an estimated four-hour period, affecting email and other applications.2 Google Workspace experienced a major global outage in August 2020, and an earlier outage in March 2020.3
Outages Aren’t Limited to On-premises Exchange Servers

The migration to and usage of cloud-based email services doesn’t mean that organizations won’t experience outages in their email services despite offloading the underlying infrastructure, patching, and configuration management. In fact, these services do experience outages from time to time.

Both Microsoft 365 and Google Workspace are fantastic communications, productivity, and collaboration suites. However, despite all of the companies’ best efforts to keep these complex applications up and running at all times, accidents and events do happen. It is for this reason and the associated cost of downtime that organizations need to evaluate how they might eliminate or mitigate the impact of downtime in their email services.

Email continuity as a risk mitigation strategy

Email continuity is a proven strategy for mitigating the impact and cost of outages of email services, keeping employees productive and thereby preserving an organization’s brand reputation. Email continuity services with FortiMail Cloud act as an insurance policy that reduces the impact and cost to near zero for organizations when an unplanned outage occurs.

Email continuity extends FortiMail Cloud as a Secure Email Gateway to first sanitize, secure, and then maintain a rolling store of live email in transit to your mail server whether that be on-premises (e.g., Microsoft Exchange Server) or in the cloud (e.g., Microsoft 365 and Google Workspace).

Figure 1: FortiMail Cloud architecture diagram.

When an outage occurs, the gateway can be operated in a hybrid gateway/server mode and employees are able to access email services through a separate webmail interface that accesses the store. The result is that employees can still send and receive emails through the course of the outage. When core email services are restored, the store syncs email, and employees can go back to using their primary email application. When an outage occurs, the gateway at no time is the efficacy or availability of email security reduced or impacted by the outage.
Key Features

Email continuity services for FortiMail Cloud key features:
- Instant email disaster recovery
- Queues 30 days of stored email on a rolling basis
- Provides uninterrupted security availability
- Ability to create, send, and receive emails
- Ability to download and access attachments
- Ability to view contacts
- Automated reconnection and synchronization

Email continuity services for FortiMail Cloud are designed to protect valuable productivity by providing emergency mailbox services when organizations experience an outage in their email services. Email continuity services make disruptions and outages of email services a non-issue for organizations. Email continuity services:
- Mitigate the impact of downtime of email services
- Reduce recovery time to near zero as employees and users access queued email directly through FortiMail
- Queue emails up to 30 days with emails available before, during, and after an outage
- Ensure uninterrupted availability of email security through at all times

Conclusion

Email continuity services with FortiMail Cloud represent a simplified way to mitigate the risk and cost associated with unplanned disruptions and outages of core email services. Though we like to consider that cloud-based services are always on and available, the truth is that even the best Software-as-a-Service (SaaS) applications and cloud-based resources do experience disruptions to services from time to time. Email continuity services offer a low-cost mechanism to keep employees productive, with the service often paying for itself after even the first experienced outage.

4  "How to Calculate the True Cost of Downtime," Data Foundry, March 17, 2021.