Service Criticality Form

MX (sending/receiving emails)

Introduction

This form is used to gather input from the community on the service criticality. The framework is detailed in https://labs.ripe.net/author/razvano/service-criticality-framework/. The service criticality has three components:

Confidentiality:
What is the highest possible impact of a data confidentiality-related incident (data leak)?

Integrity:
What is the highest possible impact of a data integrity-related incident (hacking)?

Availability:
What is the highest possible impact of a service availability-related incident (outage)? All our services are designed with at least 99% availability, so please consider outages of up to 22 hours.

Service Overview

Table 1: Service Overview

Service purpose	Send and receive emails for domains controlled by the NCC
Service owner(s)	Marco van Tol
Stakeholders	Internal: staff External: RIPE NCC members, RIPE and the broader Internet community
Types of data that the service stores or processes	Public, company-confidential data
Critical parts of the service	N/A
Non-critical parts of the service	N/A

Impact Areas

Global Routing

Global Routing	Low	Medium	High	Very High
	No / negligible	Limited reachability	Widespread	Widespread and

	impact	issues	reachability issues	persistent reachability issues

Incident Impact on Global Routing	Incident Severity
Confidentiality: (Impact level of incidents such as data leaks)	
Compromised confidentiality of the data passed through the email servers does not affect global routing.	**Low**
Integrity: (Impact level of incidents such as hack attempts)	
If email sending is compromised, someone could use the forgotten password functionality to reset access to the SSO account if two-factor authentication is not set up. In theory, this could lead to unauthorised modification of ROA and RIPE Database objects.	**High**
Availability: (Impact level of service outage incidents, up to 22 hours per quarter)	
If the email-sending functionality is not available, RIPE Database updates or other updates regarding changes in resources (new allocations, transfers, etc.) might not reach network operators in time.	**Medium**

IP addresses and AS Numbers

	Low	**Medium**	**High**	**Very High**
IP addresses and AS Numbers	No / negligible impact	Local disruptions (registration information not being available for some entities)	Regional disruptions (registration information not being available for the RIPE NCC region)	Global disruptions (lack of registration information for all AS Numbers and IP addresses)

Incident Impact on IP Addresses and AS Numbers	Incident Severity
Confidentiality: (Impact level of incidents such as data leaks)	
Compromised confidentiality of the data passed through the email servers does not affect the RIPE Database functionality.	**Low**
Integrity: (Impact level of incidents such as hack attempts)	
If email sending is compromised, one could use the forgotten password functionality to reset access to the SSO account if two-factor authentication is not set up. In theory, this could lead to unauthorised modification of RIPE Database objects.	**High**

Availability: (Impact level of service outage incidents, up to 22 hours per quarter)	
If the email-sending functionality is not available, RIPE Database updates or other updates regarding changes in resources (new allocations, transfers, etc.) might not reach network operators in time.	**Low**

Global DNS

	Low	**Medium**	**High**	**Very High**
Global DNS	No / negligible impact	Local DNS issues	Widespread DNS issues	Widespread and persistent DNS issues

Incident Impact on Global DNS	**Incident Severity**
Confidentiality: (Impact level of incidents such as data leaks)	
Compromised confidentiality of the data passed through our email servers does not affect global DNS.	**Low**
Integrity: (Impact level of incidents such as hack attempts)	
Compromised integrity of our email servers does not affect global DNS.	**Low**
Availability: (Impact level of service outage incidents, up to 22 hours per quarter)	
Outage of our email servers does not affect global DNS.	**Low**