

Prepare



Connect with trusted communities
to share information

Cyber Against Humanity

Prepare



Implement a central log management system

Prepare



Implement event and alert management system for effective first triage

Prepare



Implement case management system for effective incident handling

Prepare



Implement automation and orchestration to support analysts during first triage and incident investigations

Prepare



**Implement detection use cases to
cover the required scope**

Prepare



Build know-how for new threats and provide trainings to analysts

Prepare



Establish visibility into all critical assets and platform

Prepare



Ensure central log collection for relevant logs on systems in monitoring and incident response scope

Prepare



Deploy remote forensics software

Cyber Against Humanity

Prepare



Deploy tools and capabilities for containment

Prepare



Prepare decision tree and establish processes for GDPR readiness

Prepare



Attend or organize internal and external exercises

Prepare



Prepare and build coordination and escalation team for major incidents

Prepare



Prepare and implement playbooks
for assisting analysts

Prepare



Prepare a list of critical assets for prioritisation

Prepare



Ensure knowledge of all used operating systems in the team

Prepare



Establish different kinds of communication channel for various stakeholders

Prepare



Make a list of contact details for
relevant peers

Prepare



Ensure and implement collaboration between SOC and CSIRT and clarify responsibilities during an incident

Prepare



Build backup infrastructure in case
of emergency

Prepare



Search for threats through regular threat hunting

Prepare



Implement detection to find sensitive data which was indexed in a public search engine

Prepare



Joker - invent a new preparation step

Prepare



Joker - invent a new preparation step

Prepare



Joker - invent a new preparation step

Detect



**Search for email attributes inside all
of your mailboxes**

Cyber Against Humanity

Detect



Search for cron jobs on Linux server

Cyber Against Humanity

Detect



Search for configuration settings on
remote system

Detect



Search for malicious configuration
changes on remote system

Detect



Search for processes on a remote host

Detect



Search for files on a remote host

Cyber Against Humanity

Detect



Search for file hash on a remote host

Cyber Against Humanity

Detect



Search for destination IPs in
network logs

Cyber Against Humanity

Detect



Search for source IPs in your
network logs

Cyber Against Humanity

Detect



Search for domains in your network logs

Detect



Search for referrer in your network logs

Detect



Search for user agent in your
network logs

Detect



Search for URL in your network logs

Cyber Against Humanity

Detect



Search for leaked data in public search engines and paste sites

Detect



Detect credential abuse by looking
at login anomalies

Detect



Detect credential leakage through monitoring external paste sites

Detect



Detect leaked sensitive information
on public source code repository

Detect



Detect lateral movement with pipes

Detect



Detect lateral movement with local admin

Detect



**Detect lateral movement with
credential abuse**

Detect



Detect malicious process injection

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Detect



Detect leaked information through active cybercrime forum monitoring

Detect



Detect unauthorized access on
remote system

Detect



Detect unknown domain administrator in your user management

Detect



Detect unknown local administrator account on compromised system

Detect



Detect in-memory malware on
remote host

Detect



Check GDPR relevance

Cyber Against Humanity

Detect



Find attacker through attacker's real IP which leaked because of bad op-sec

Detect



Joker - invent a new detection method

Detect



Joker - invent a new detection method

Detect



Joker - invent a new detection method

Respond



**Remove persistence mechanisms
on compromised system**

Respond



Remove malicious config settings
on a compromised system

Respond



Remove malware on compromised system

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Respond



**Stop malicious process on
compromised system**

Cyber Against Humanity

Respond



Stop data leakage on compromised system

Respond



**Remove sensitive data on public
accessible website**

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Respond



Start first response to gather volatile
data

Respond



Collect and analyse logs from
compromised system

Respond



Collect evidence from compromised system

Respond



Collect files from compromised
system

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Respond



Collect the list of local accounts
from compromised system

Respond



Create and collect disk image for a compromised system

Respond



Create file system timeline for a disk image

Respond



Extract C2 IPs from a malware sample

Respond



Search for found C2 servers

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Respond



Search for other affected systems
after initial compromise

Respond



Block domain names

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Respond



Block IPs

Cyber Against Humanity

Respond



Block URLs

Cyber Against Humanity

Respond



Block access to API

Cyber Against Humanity

Respond



Block employee account

Cyber Against Humanity

Respond



Isolate system

Cyber Against Humanity

Respond



Take remote system offline

Cyber Against Humanity

Respond



Disable network connectivity on
remote system

Respond



Delete malicious emails in
employees mailboxes

Cyber Against Humanity

Respond



Sinkhole C2 server

Cyber Against Humanity

Respond



Capture traffic to C2 server

Cyber Against Humanity

Respond



Force password reset

Cyber Against Humanity

Respond



Add evidence to long time storage

Cyber Against Humanity

Respond



Mitigate a DDoS attack

Cyber Against Humanity

Respond



**Initiate hot patching or immediate fix
of exploited vulnerability**

Respond



Create a GDPR notification

Cyber Against Humanity

Respond



Document indicators of attack and indicators of compromise centrally.

Respond



Share indicators of attack and of compromise with the community

Respond



Joker - invent a new respond action

Cyber Against Humanity

Respond



Joker - invent a new respond action

Cyber Against Humanity

Respond



Joker - invent a new respond action

Cyber Against Humanity

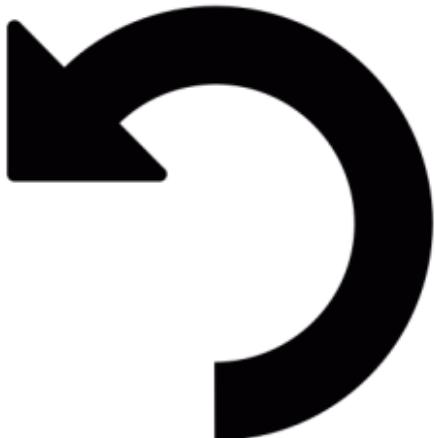
Respond



Joker - invent a new respond action

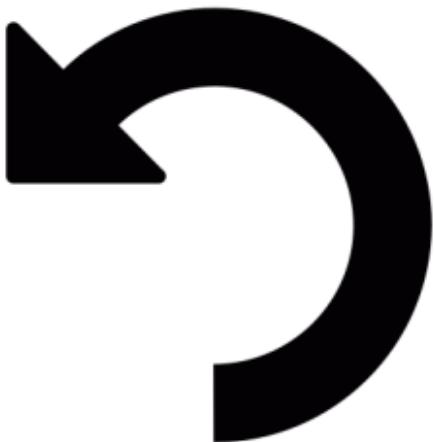
Cyber Against Humanity

Recover



Initiate fresh installation of
compromised system from trusted
install sources

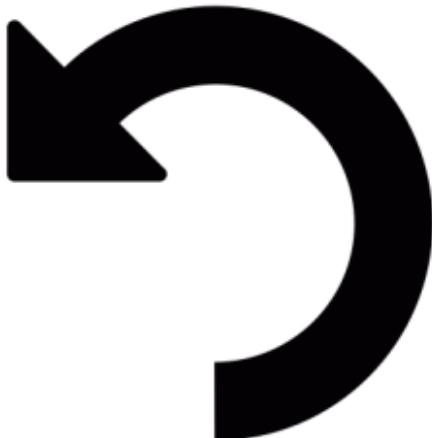
Recover



**Initiate the patching of a critical
vulnerability**

Cyber Against Humanity

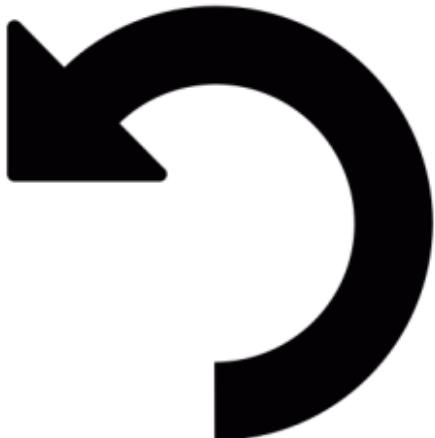
Recover



Initiate an audit on a platform

Cyber Against Humanity

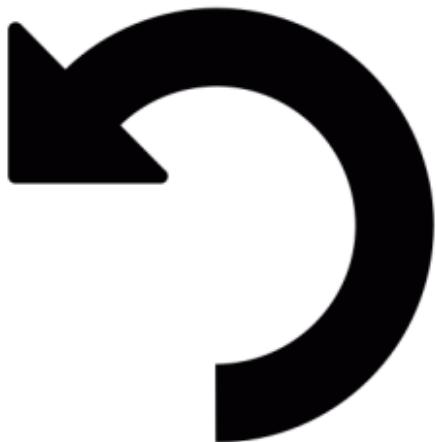
Recover



Restore backup

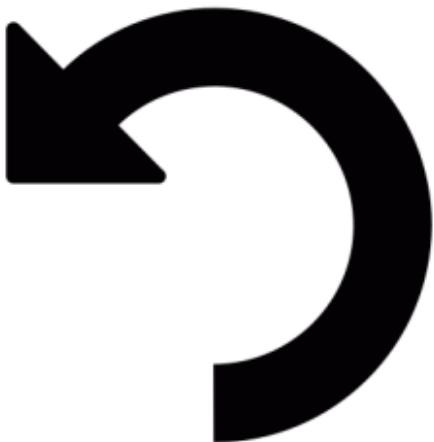
Cyber Against Humanity

Recover



Bring the service online which you took offline during the incident

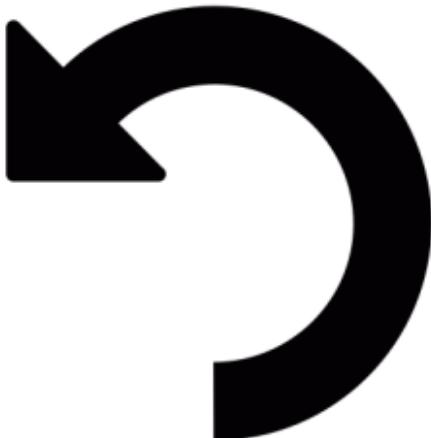
Recover



Rotate API keys for a compromised account

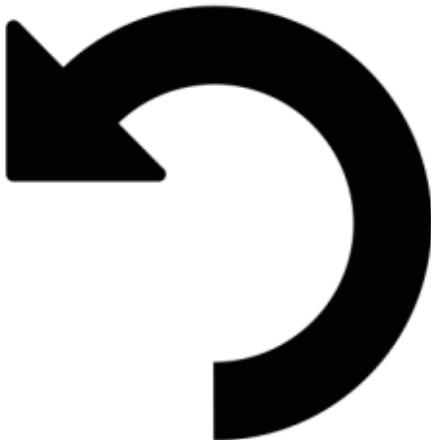
Cyber Against Humanity

Recover



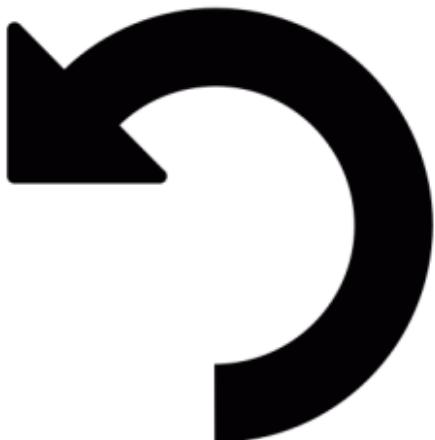
Change credentials for a compromised service account which was disabled during the incident

Recover



Implement long term monitoring
through new security monitoring use
cases and incident response
processes

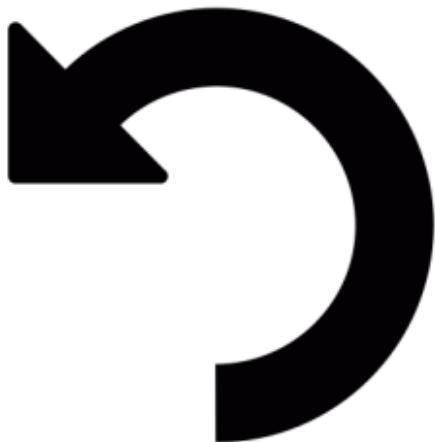
Recover



Add a security deficit to the policy framework

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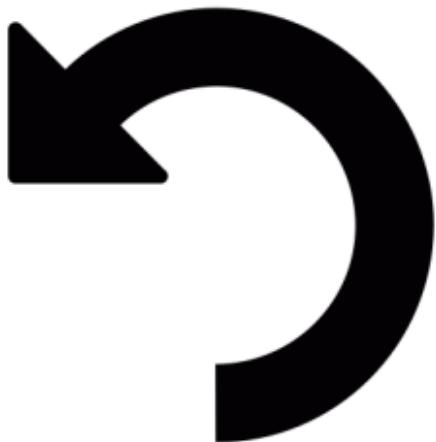
Recover



Joker - invent a new recover action

Cyber Against Humanity

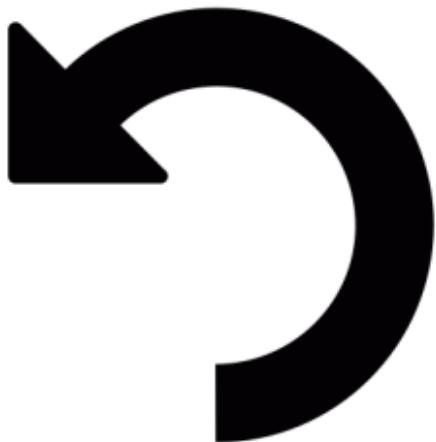
Recover



Joker - invent a new recover action

Cyber Against Humanity

Recover



Joker - invent a new recover action

Cyber Against Humanity

Lessons Learned



Organize and perform lessons learned meeting

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Lessons Learned



Define technical debts and report them accordingly

Lessons Learned



Document results and new knowledge for the team and company

Lessons Learned



Improve incident response
processes

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Lessons Learned



Improve incident detection
capabilities

Lessons Learned



Add new detection rule to internal
and external repositories

Lessons Learned



Joker - invent a new lessons learned step

Lessons Learned



Joker - invent a new lessons learned step

Lessons Learned



Joker - invent a new lessons learned step

Lessons Learned



Joker - invent a new lessons learned step

Communication



Publish external news article

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Communication



Inform public relations department
about possible questions from
outside

Communication



**Communicate findings to
management**

Communication



Create an incident report

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Communication



Write answer to request made on external platform

Communication



Joker - invent a new communication way

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Communication



Joker - invent a new communication way

Cyber Against Humanity

Communication



Joker - invent a new communication way

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