

The Department of the Air Force is conducting CJAs to identify key mission systems and assets and develop an understanding of dependencies and deficiencies in the event of an impact to water or energy services.



A CJA evaluates the impact of a denial of service to assets that enable key missions, such as the F-35.

Crown Jewels Analysis

A Crown Jewels Analysis (CJA) identifies on- and off-base systems and assets whose failure can cause mission impact if a service, such as energy or water, is denied. The CJA is a facilitated process among key stakeholders and its results establish a common understanding of the known and unknown dependencies, deficiencies, and potential workarounds necessary to continue the mission.

Why Conduct a CJA?

A CJA provides an installation with several advantages:

1. Facilitates a joint conversation among key stakeholders at a level that is not often done; this helps break down assumptions and supports a greater understanding of the mission.
2. Remains unclassified, allowing information to be more accessible to various mission stakeholders.
3. Evaluates the impact of a denial of service to key mission systems and assets, regardless of what causes the denial of service. By taking a probability-agnostic approach that accounts for low-probability, high-impact events, an installation can be best prepared to execute their mission, no matter the situation.
4. Informs an installation's planning and investment strategy to target areas where investment may most effectively enhance mission resilience.
5. Supports project justification. An installation can use CJA results to help demonstrate that a project can minimize impact to mission during a denial of service event, lending additional support for project funding and execution.



Crown Jewels Analysis

How Do CJAs Work?

As part of a CJA Workshop, mission owners are guided through a process to decompose the selected mission into a four-tier hierarchy: Mission Objectives, Functions, Tasks, Assets/Mission Systems (see Figure 1). Then, through collective discussion, stakeholders assign relative weights for Mission Objectives and criticality scores for Functions, Tasks, and Assets/Mission Systems. Based on data collected during a CJA Workshop, the CJA Tool produces the following outputs:

- A list of Crown Jewels, which are on- and off-base systems or assets whose failure stand to impact the mission.
- Mission Objectives that may be particularly impacted by a denial of service event because they rely on several Crown Jewels.

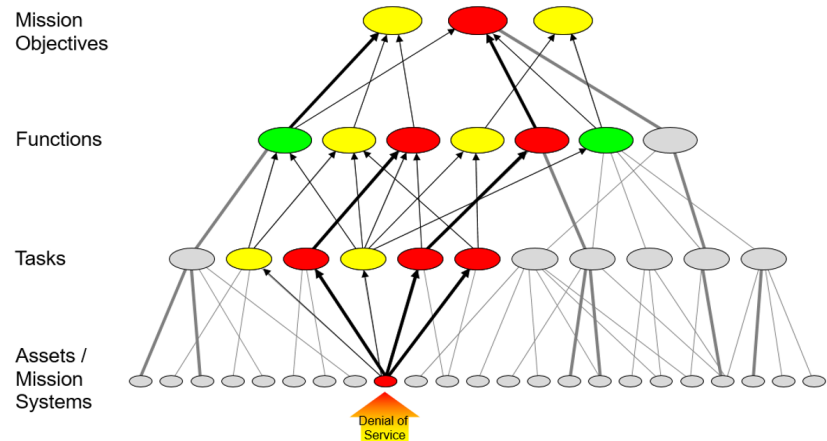


Figure 1. Denial of Service Event Impact on CJA Mission Decomposition Tiers

Integration with the Installation Energy Plan (IEP)

To help ensure mission needs drive strategic planning, the DAF has focused on integrating the CJA with ongoing development of Installation Energy Plans (IEPs) across the enterprise. While the CJA aims to identify those mission systems or assets whose denial of service could lead to mission impact, the IEPs aim to identify energy and water resilience requirements/gaps that could lead to denial of service and strategies that mitigate the gaps. To date, SAF/IEE and AFCEC's Office of Energy Assurance have conducted joint workshops for Malmstrom Air Force Base (AFB), Creech AFB, and Aviano Air Base, which provided useful insights into how data from the CJA informs the IEP's Resilient Energy Assessment Framework model. Efforts on this will continue towards the ultimate goal of ensuring mission-focused information and analysis drive priority strategies under the IEP.



The Department of the Air Force is taking a resilience-focused approach to future energy and water projects concentrated on providing strategic agility for missions and installations.

For more information:

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