

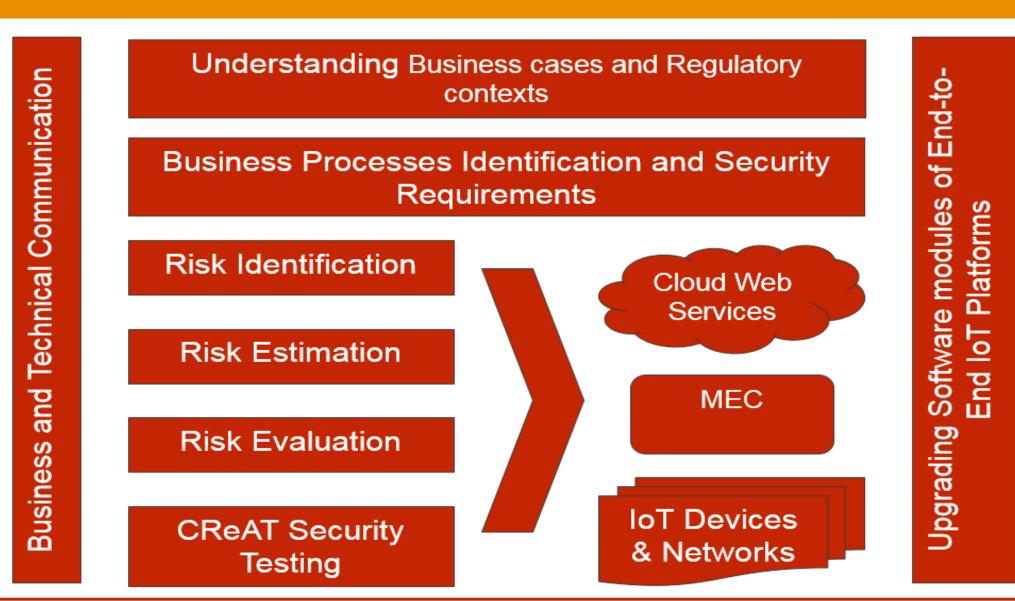




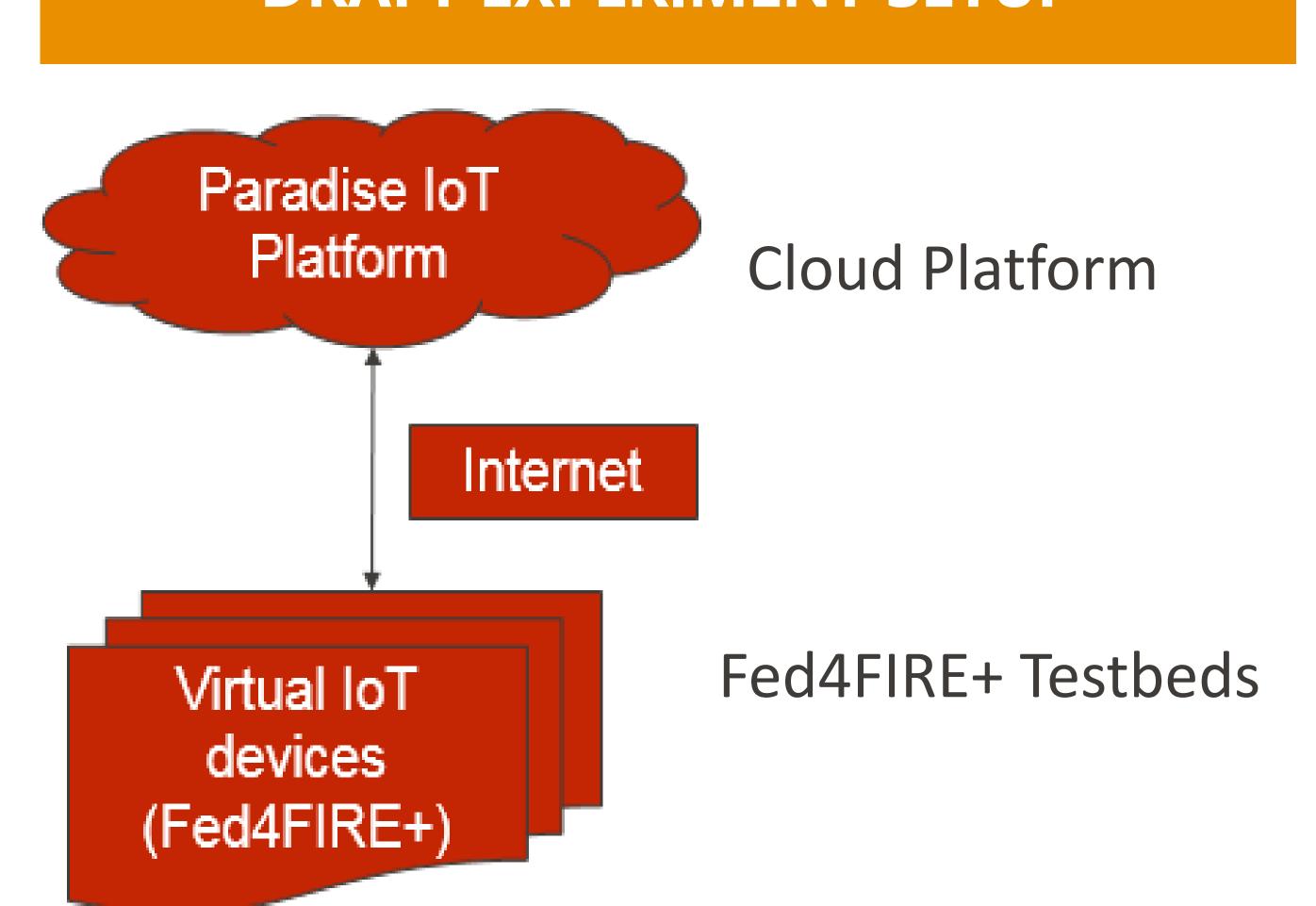
DRAFT GOALS

- Develop a holistic framework comprised cybersecurity risk assessment, security incident and event management, and cybersecurity resilience readiness.
- Develop IoT device trust framework and trust seal.
- Test DRAFT frameworks with four Fed4FIRE+ testbeds.

CYBERATTACK RISK ASSESSMENT FRAMEWORK



DRAFT EXPERIMENT SETUP



SIEM and CYBERATTACK RESILIENCE FRAMEWORK

Security incident and event management (SIEM) provides dynamic threat analysis, integrated security monitoring, and security management policies in the DRAFT framework.

Cyberattack resilience is achieved through five steps

- 1. Preparation through cyberattack risk assessment.
- 2. Detection through the SIEM.
- 3. Response
- 4. Recovery
- 5. Review

DRAFT IOT DECIVE TRUST FRAMEWORK AND SEAL

IoT device trust framework is divided into four high level categories –

- 1. Security principles
- 2. User access and credentials
- 3. Privacy and transparency
- Notification.

Note – this list is non-exhaustive and should be treated as a first version of the DRAFT experiment's effort on developing the IoT device trust framework.

- To obtain the IoT device trust seal, the device must comply with all set of features of the framework.
- When under test for the trust seal, if the IoT device is found to be compliant with a subset of the mentioned list, then DRAFT experiment proposes to quantify the trustworthiness as a percentage.
 - If the device complies with 10 features out of the 15 listed above, then the trustworthiness is calculated to be 66.67%.

LESSONS LEARNED

- During testing, known, simulated cyberattacks were launched from the testbed infrastructure to DIGI's Cloud Platform.
 - Insecure default settings, insecure ecosystem interfaces, insecure authentication/authorization, and insecure update mechanism
- No breach to the current web services of the Platform detected.
- Digiotouch will perform additional and more intelligent cyberattacks to test the DRAFT frameworks.

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