Completion Review

Cherry Blossom x86-Flytrap v1.0

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Agenda

Subject

- Requirements
- System Architecture
- CONOPS
- FAT Overview
- FAT Findings
- FAT Observations
- Product Support

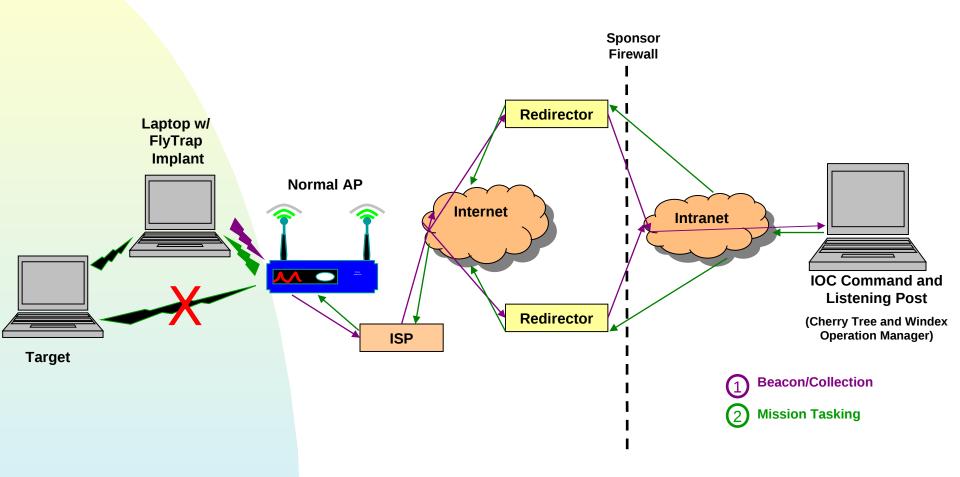
Briefer

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Flytrap Requirements

- ESSN_010_2011: Port Cherry Blossom Flytrap capabilities to x86 computer platform
 - Mimic the operation of a WLAN Access Point : act as a repeater (layer 2 bridge) or (layer 3) router on an existing wireless network
 - Encourage unwitting clients to connect to Flytrap instead to normal Access Point
 - Perform normal Flytrap operations: e.g., packet inspection, data harvesting/copy, redirection
- ☐ This delivery closes ESSN_010_2011

CherryBlossom x86 Flytrap Architecture



Cherry Blossom x86 Flytrap CONOPS

- TOO installs Cherry Blossom x86 Flytrap software on a laptop computer running Fedora Core 14 operating system (provided)
- TOO positions the laptop in the desired location, i.e., in proximity to the normal AP and target client device(s)
- TOO connects laptop to AP as a wireless repeater or router
- Based on a stronger signal from the Flytrap, the target client connects to the Flytrap rather than to the normal AP
- The Flytrap beacons to the IOC CherryTree LP/CP server and downloads mission tasking from the server.
- If the Flytrap detects packets to or from a "target" (MAC address, email address, chat name, or traffic with specified keyword strings), it can execute specific actions at the direction of the LP/CP, including:
 - sending an alert to the LP/CP,
 - copying traffic to LP/CP,
 - redirecting the target's web requests to web sites under COG control using the latest Windex interface, or inserting traffic.

FAT Overview (1 of 2)

- Cherry Blossom x86 Flytrap FAT was conducted by WGB and the contractor on April 13, 2011
 - Testing was based on Strategic Requirement ESSN 010 2011
 - Testing was conducted with the following equipment:
 - Panasonic CF-74 laptop with x86 Flytrap software and Ubiquiti PCMCIA and Espress Card NICs installed
 - Target laptop
 - ☐ CherryTree LP/CP Server v3.0.6

FAT Overview (2 of 2)

- The following Flytrap features were tested successfully:
 - Catapult alerting
 - Email and chatname alerting
 - MAC address alerting, using the target laptop's wireless MAC
 - Email/Chatname/MAC Harvesting
 - Copy
 - Note: intermittent issues occurred with the hotel's intrusion detection system similar to what happened with the DD-WRT test on 4/12/11 and with the previous Flytrap v4.0 FAT in December 2010. Refer to the Cherry Blossom DD-WRT TDR briefing for more details
 - Windex redirection
 - VPN Link and Proxy
- The Access Point Flytrap functions of Arbitrary Application Execution and Upgrade Inhibit are not applicable to this device

FAT Findings

CONTEXT

IMPACTS

WORK AROUND OR MITIGATION

RECOMMENDATION

1. None

FAT Observations

None

Product Support

- Tool and Project Documentation
 - Cherry Blossom x86 Flytrap v1.0 software and installation script (CD)
 - Fedora Core 14 Installation (DVD)
 - Cherry Blossom x86 User Manual and Quick Start guide
 - Related hardware: Ubiquiti PCMCIA and Express Card WLAN adaptors, external 802.11 antennas, Toughbook CF-74 laptop harddrive with OS and Flytrap sw installed