



~ ATN Seminar – Context Management ~ Chiang Mai, Thailand

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Federal Aviation Administration (FAA) William J. Hughes Technical Center (WJHTC)





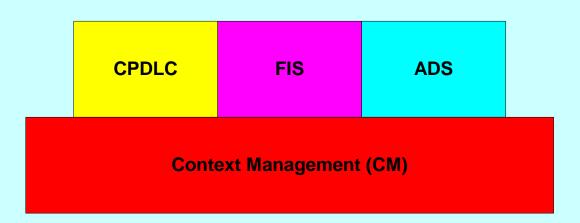
Context Management Overview

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Context Management





 Context Management is a support application for other Air-Ground Applications



Context Management



- Context Management (CM) is essentially a directory (name) service
 - CM operation compares conceptually to the process of determining IP addresses from URLs on the Word Wide Web

 Under Edition 3 of the SARPs, CM will play a role in securing airground communications



Context Management Process

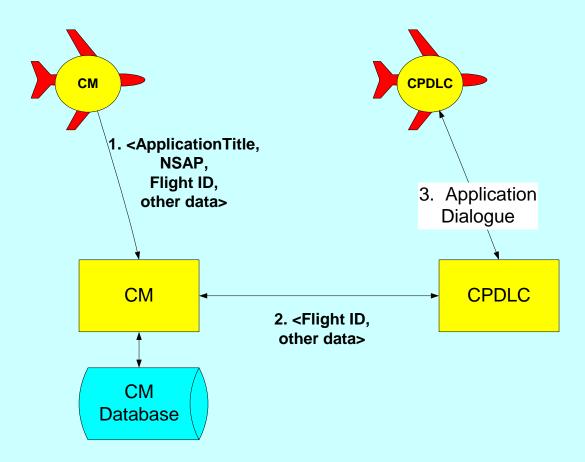


- Context Management (CM) for Ground-Initiated Applications
 - 1. Aircraft "logs-in" to CM creating an entry in the CM database with: <Application Title, NSAP address, Flight ID, other "matching" data>
 - 2. A ground-based air-ground application retrieves the CM entry using for example:
 - <Flight ID, other "matching" data>
 - 3. When conditions are appropriate, the ground-based air-ground application initiates a connection to establish an application dialogue with the aircraft



Context Management (Ground-Initiated Application)





Context Management (CM) and Controller Pilot Data Link
 Communication (CPDLC)



Context Management Process



- Context Management (CM) for Air-Initiated Applications
 - 1. Entries are pre-stored in the CM database for ground-based airground applications
 - 2. Aircraft "logs-on" to CM (for example with the Application Title of the air-initiated application) and retrieves the pre-stored entry in the log-on response:

<Application Title, NSAP address, other "matching" data>

3. When conditions are appropriate, the aircraft-based air-ground application initiates a connection to establish an application dialogue with the aircraft



Context Management Summary



- Context Management is a directory service to obtain NSAP addresses for Application Titles
- Additional CM services (Forward, Update) support transition across various ATC domains
- In the Asia and Pacific Region, administrations will have to establish individual/common CM service to support ATSC Air-Ground applications