



**OCAF**  
a focus group  
of ITU-T

A decorative graphic consisting of a grid of red squares. The grid is 4 rows high and 4 columns wide, with the top-left square missing. The squares are arranged in a way that they appear to be floating or overlapping.

# Open Communication Architecture Forum

## OCAF Overview

An Introduction to OCAF by Doug Dreyer (Chair), Subhash Patel (V. Chair)

# Open Communications Architecture Forum Overview

## **Agenda:**

- **OCAF Snapshot**
- **Members**
- **Objectives**
- **Goals and deliverables**
- **Documents and web-ware**
- **Q&A**



## General Objectives

- Agree on specifications for framework, COTS categories and components for new carrier grade open platforms
- Accelerate cost benefits of adopting COTS technology based on the Carrier Grade Open Environment (CGOE)

## Benefits

- Enable COTS component ecosystem
- Reduce Cost & Time to Market
- Enable TEMs & SPs to Quickly Launch New Products for Wireless and Wireline
- Ability to mix and match solutions from several Solution Providers

## Information:

- ITU Announcement May 20, 2004
- OCAF announcement July 29, 2004

<http://www.itu.int/ITU-T/ocaf/index.html>

## Structure/Focus

- Solution Work Group
- Carrier Grade Open Environment Working Group
- Modular, Reusable COTS Components Based on the Carrier Grade Open Framework (CGOE) Categories
- High Availability
- Systems Interoperability
- Initial Mapping of Push-to-Talk and IP Centrex services

## Members:

- Founding: Avaya, Cisco, Comcast, Deutsche Telekom, France Telecom, Lucent, IBM, Nortel Networks, NTT, Telecom Italia and Siemens...
- Liaison relationships considered: 3GPP, Parlay, SAF, IETF, OSDL, TMF, OMA, DMTF etc
- HP, Nokia, Motorola participating via SAF
- SUN, SBC, NEC, Marconi, Alcatel etc as new members....

## OCAF Members (August 02, 2004)

### Founding Members

- Avaya
- Cisco
- Comcast
- Deutsche Telekom
- France Telecom
- Lucent
- IBM
- Nortel Networks
- NTT
- Telecom Italia
- Siemens

### Participating from SAF

- Clovis
- Motorola
- IBM
- HP
- Nokia

### Potential New Members

- |            |                      |
|------------|----------------------|
| ■ Alcatel  | ■ Pinion             |
| ■ AMCC     | ■ Horizon            |
| ■ Cern IT  | ■ SBC                |
| ■ ECI      | ■ Silicon SW Systems |
| ■ Huawei   | ■ Starent Networks   |
| ■ Kingston | ■ SUN                |
| ■ Marconi  | ■ Telekom Austria    |
| ■ MOC      | ■ ZTE                |
| ■ Molex    | ■ Consultants        |
| ■ NEC      |                      |
| ■ OSDL     |                      |

## OCAF Objectives

The objective of OCAF Focus Group is to agree on specifications for a framework and a set of COTS categories and components for the Carrier Grade Open Environment (CGOE) for NGN

- Promote standards and a common framework to reduce cost, enhance functionality and improve time to market for all COTS based solutions for NGN
- Use existing standards as much as possible as basis for CGOE
- To define the CGOE components and interfaces to realize a Carrier Grade open, plug and play environment
- Establish critical mass to identify requirements and reduce individual investments
- Exchange considerations for reference implementations to facilitate COTS development
- Reduce the cost and risk of developing new NGN services by promoting the expansion of COTS component options
- Accelerate availability of CGOE compliant components and offerings from OCAF FG member companies

## CGOE Working Group Scope & Objectives

- Accelerate marketplace adoption of COTS technology with a focus on identification, classification, and interoperation of commercial off the shelf (COTS) components that satisfy the requirements of next generation network (NGN) services defined by the OCAF Solutions Work Group.
- The CGOE Work Group will:
  - emphasize use of common principles and criteria that enable vendors to produce the greatest amount of openness in the most number of COTS components and improve integration of COTS components from multiple vendors into a single system for support of NGN services.
  - Consider COTS components according to their relationship to applications and other COTS components, based upon existing standards and external interfaces where possible, documenting any needed standard and interface enhancements to the respective owner, and proposing additional standards and interfaces only when an appropriate one does not exist.

## Solutions Work Group Scope & Objectives

- Develop a methodology to validate and prove the CGOE
  - Starting points are service provider use case scenarios which can be described by their functional and non functional requirements regarding the underlying production platforms
  - Requirements can be broken down into the platform's building blocks and further on into the technical components of the building blocks.
  - Disassembly process adds further requirements to the technical components in the area of their integration capabilities.
  - Final look-up of these components in the CGOE validates the framework and facilitates fine-tuning it.
- The methodology ensures that interrelationships among the COTS components of the CGOE can be observed and exploited.
  - These interrelationships result from components belonging to the same use cases and eventually the same building blocks.
  - This insight can be facilitated to formulate OCAF recommendations that are related to ensure interoperability of certain COTS components of certain types.
  - Interoperability is no general purpose requirement and also much too complex to ensure it among all types of components in all circumstances but is the key to obtaining the benefit from COTS components for the entire industry.

## OCAF CGOE / OMA Alignment

1. Agree on the work split between OMA and OCAF
  - OMA Focus: Functional requirements for the Application Services (accord CGOE Layering), esp. for the mobile/ industry specific Basic Network Application Services and Protocol Services
  - OCAF Focus: reference architecture to construct applications / Services via COTS components, i.e. esp. the non functional requirements
2. Align OMA OSE architecture and OCAF CGOE architecture
  - Reuse OSE "intrinsic" and enabler concept also as basic concepts in the CGOE reference architecture
  - Reuse CGOE framework in the OSE reference architecture in the "execution environment"
3. Goal: Partnership OMA/OCAF
  - Liaison Standards relationship, same principle as with SAF
  - OMA will participate as active member in our solution group (functional requirements) and/ or vice versa
  - CGOE will participate via active members in the OMA reference architecture team
  - OMA will sent active members of the OMA reference architecture team to CGOE
4. Next steps:
  - Invite OMA to next face to face Oct 21-22 in Munich



# Back up charts

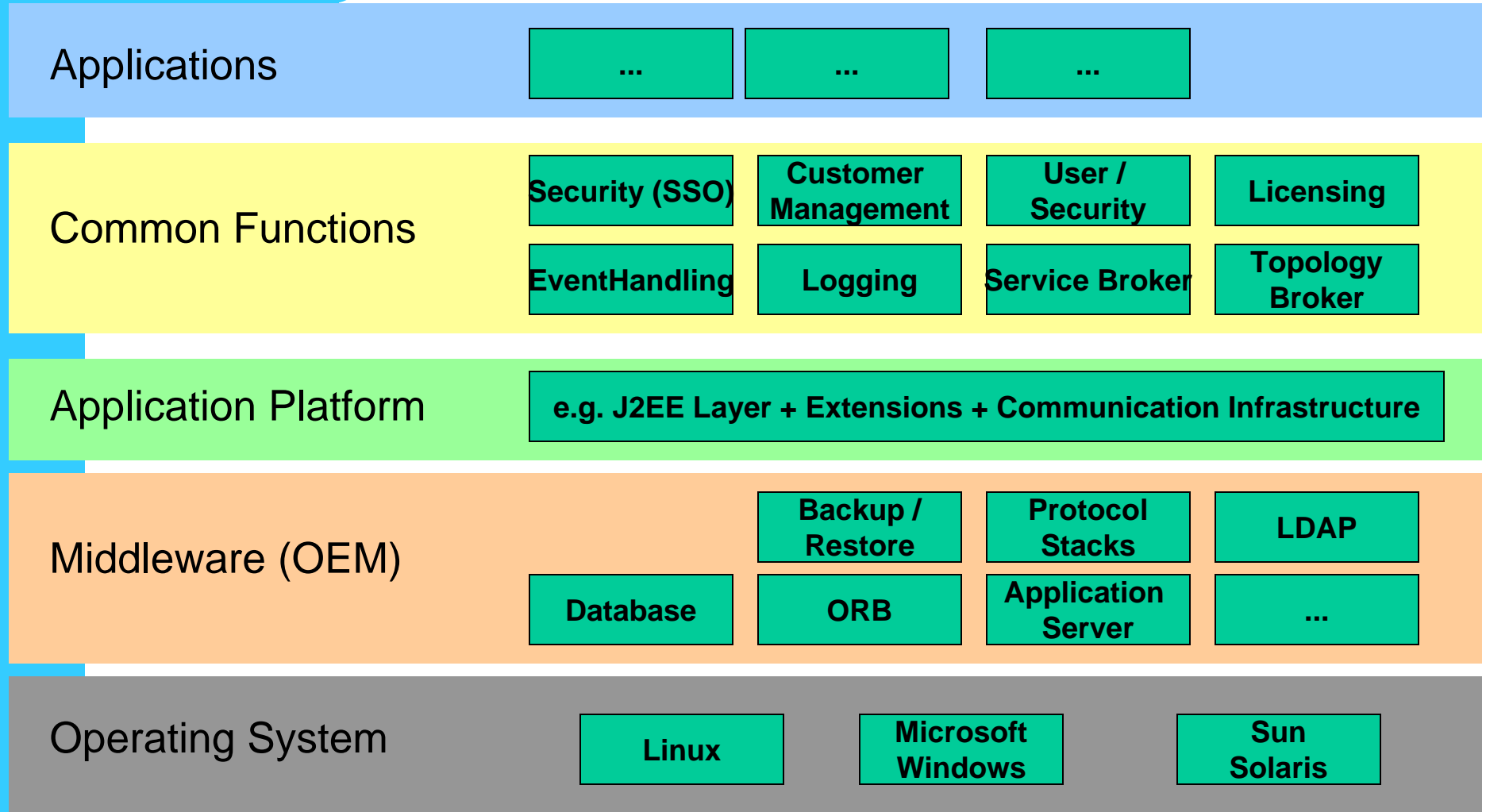
## Documents and web-ware

- Key governance documents include:
  - Non-Disclosure Agreement (NDA)
  - Procedures
  - Charter
- Other documents include:
  - FAQs
  - New Member Application process
- All of above can be found at:
  - <http://www.itu.int/ITU-T/ocaf/index.html>
- Most business conducted electronically

## OCAF mailing lists

1. ocaf@itu.int
  - **for OCAF Members**
  - **subscription via:** [www.int.int/ITU-T/ocaf/members.html](http://www.int.int/ITU-T/ocaf/members.html)
  - ***[common form for subscribing to the mailing list and FTP area]***
2. ocaf-solutions@itu.int
  - **OCAF solution WG**
  - **subscription via request from the WG Chair**
3. ocaf-cgoe@itu.int
  - **OCAF CGOE WG**
  - **subscription via request from the WG Chair**
4. ocafguest@itu.int
  - **for non OCAF Members**
  - **subscription via:** [www.int.int/ITU-T/ocaf/guests.html](http://www.int.int/ITU-T/ocaf/guests.html)
  - ***[common form for subscribing to the mailing list and FTP area]***

## Architecture (generic)



# OCAF CGOE COTS Reference Model

