In Memory Data Grid
<table>
<thead>
<tr>
<th>Service Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Access Line Connections</td>
<td>2,650,995</td>
</tr>
<tr>
<td>Fixed Broadband Active Retail Subscribers</td>
<td>1,896,336</td>
</tr>
<tr>
<td>Cosmote TV Subscribers</td>
<td>541,907</td>
</tr>
<tr>
<td>Mobile Communications Subscribers / Greece</td>
<td>7.9 mn</td>
</tr>
</tbody>
</table>
Cosmote In Memory Data Grid

Enterprise Service Bus (OSB)

Cosmote In-Memory Data Grid

Network Platforms

Oracle UCM
OSM COM
OSM SOM-TOM
Billing Mobile
SAP - ERP
Oracle UCM
Legacy Applications
Siebel Digital ID

API Gateway
Portal ATG
App
Wholesale
MyCosmoView
Mobile OC
Siebel OC (Fixed)

FRONTEND
MIDDLEWARE
BACKEND SYSTEMS
NETWORK PLATFORMS

IT Architecture - Today
COSMOTE in Memory Data Grid

- Intermediate layer of Customer Systems (OneApp, Portals, MyCosmoView etc.)
- Unified Information System providing Customer Data (fixed and mobile)
- Hiding the complexity and overcoming the limitations of a traditional architecture
CIMDG Architecture

Cosmote In-Memory Data Grid

1. Synchronization
CIMDG Architecture

1. Synchronization
   - CRM Fixed
   - CRM Mobile
   - Billing

2. Advance Replication
   - GG HotCache
   - Stage DB

Cosmote In-Memory Data Grid

API Gateway

Enterprise Service Bus

Aggregation layer

MyCosmoView

Portal

App

ERP

Cosmote ID

UCM
CIMDG Architecture

Enterprise Service Bus

Aggregation layer

Cosmote In-Memory Data Grid

1. Synchronization

2. Advance Replication

3. Caching

Portal

App

API Gateway

MyCosmoView

Cosmote ID

ERP

UCM

CRM Fixed

Stage DB

GG HotCache

CRM Mobile

Billing
CIMDG Architecture

Enterprise Service Bus

Aggregation layer

Golden Gate

Stage DB

MyCosmoView

API Gateway

Portal

App

Cosmote In-Memory Data Grid

1. Synchronization

2. Advance Replication

3. Caching

4. Aggregation layer

CRM Fixed

CRM Mobile

Billing

ERP

Cosmote ID

UCM
What we wanted to achieve and we have achieved

The Principles

• **Always on, always available** for all Digital Channels and main agents applications

• Increased **Performance** and **Throughput for best CX** in a world that customer does not want to wait in his interaction with COSMOTE

• **Future proof** solution, build something that will be here also in the next years in an Digital and IT world which is continuously changing

• Support all the **important business digital vision** without reaching a dead-end with COSMOTE IT Infrastructure
Benefits

IT Benefits
- Faster response time
- Bigger throughput
- High performance
- High availability

Financial Benefits
- Hardware Infrastructure
- Operational support
- Licenses of third party vendors

Business Benefits
- Easy to scale allowing the support of increased number of new users and new functionalities
- Digitalization of processes – minimizing customer calls and physical presence at COSMOTE’s shops
- Zero downtime for Customer Systems
Statistics

• A total of 70 Services online
• More than 200 replicated tables
• More than 0.5TB of Cached Data

85% ...of sync calls are routed to COSMOTE in Memory Data Grid

• ~Complete Customer View: Customer Info, Assets, Tickets, Offers, Orders, Interactions
• 10 Source Systems: CRM Fixed, CRM Mobile, UCM, ePOS, Geneva, IRM, UIM, ERP SAP, BSCS, Promitheas

~20M Service Calls / day
~17ms response on Aggregation layer

“COSMOTE In Memory Data Grid has become an indispensable part of our architecture
Thank you!