ESO Industry Information Day

Dublin 26.3.2015

BlueCielo ECM Solutions – Working with ESO
Delivering Unprecedented Confidence and Control for External and Internal Collaboration
Agenda

- BlueCielo ECM Solutions
- Facts about Finland
- How we did it and how is working with ESO?
- Benefits from relationship to ESO
- Questions
BlueCielo ECM Solutions

Accurate Data - Any Time - Anywhere

**Engineering Content Management & Asset Information Management** software to maximize customer’s profitability and efficiency.

BlueCielo software ensures that **accurate, up-to-date data** is always easily accessible from **any location at any time**.

BlueCielo connect **maintenance** and **engineering**, support **global collaboration** and improve **data handover**.
BlueCielo ECM Solutions At A Glance

Customers

$1.5 T+ ASSETS
300K+ USERS
CUSTOMERS 1200+
50+ COUNTRIES

BlueCielo

35 YEARS
EMPLOYEES 200+
50+ PARTNERS
15%+ GROWTH

Value

FOCUS INDEPENDENT
COMMITMENT EXPERTISE
BlueCielo’s Customers Worldwide

Utilities
- AXPO
- RWE
- RWE Regional Werke
- Électricité de France
- Tenet
- Tenncroft
- Tri-State
- NYPA
- nationalgrid
- Fennovoima

Oil & Gas
- Shell
- ExxonMobil
- LARICINA
- Total
- Fluxys
- GDF Suez
- Petrofac

Chemical
- BASF
- Invista
- AkzoNobel
- Arkema
- TOTAL
- INEOS
- Koppers
- Kaneka
- Huntsman

Pharma
- Johnson & Johnson
- Pfizer
- AbbVie
- Abbott
- AstraZeneca
- AMGEN
- SANOFI
- Wyeth
- Grifols
- Novartis

Mining
- Trafigura
- BHP Billiton
- Metso
- COPESUL
- Outotec
- Vale
- ArcelorMittal

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Facts About Finland

People
- Population: 5.4 million, 15.8 inhabitants per km² (40.5 per square mile)
- Life expectancy: Men 76 years, women 83 years

State & Government
- Independence:Declared on December 6, 1917. Previously a grand duchy in the Russian empire for 108 years, and a part of Sweden for 600 years before that
- Form of government: Republic, parliamentary democracy, multiparty coalition cabinet
- International cooperation: Member of United Nations since 1955 and European Union since 1995

Society & Economy
- Key features: High standard of education, social security and healthcare, all financed by the state
- GDP per capita: 35,571 euros (2012)
- Main exports: Electro-technical goods, metal products, machinery, transport equipment, wood and paper products, chemicals
- Main imports: Raw materials, investment goods, energy, consumer goods (for example cars and textiles)
- Currency unit: Euro

Geography & Climate
- Area: 338,424 km² (131,985 square miles), the fifth-largest country in Western Europe
- Greatest length from north to south: 1,160 km (720 miles)
- Capital: Helsinki (1.25 million inhabitants in metropolitan area)
- Climate: Great contrasts – cold winters and fairly warm summers (2013 extremes: coldest day in Sodankylä -39.7 C/-39.5 F, warmest day in Liperi 32.4 C/90.3 F)
### BlueCielo History With ESO

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1995-1999</td>
<td>BlueCielo Project Portal (former Kronodoc) is originally spin off (research project) from CERN, the European Organization for Nuclear Research in Geneva.</td>
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<td>Spring 2010</td>
<td>BlueCielo ECM Solutions B.V acquired Kronodoc Oy.</td>
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<td><strong>Summer 2010</strong></td>
<td>First sales contact to ESO in Germany.</td>
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<td>December 2010</td>
<td>Feasibility study agreement was signed.</td>
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<td><strong>December 2011</strong></td>
<td>BlueCielo Project Portal license, maintenance and delivery agreement was signed.</td>
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<td>January 2012</td>
<td>Implementation project was started. 1st phase implementation to Cloud.</td>
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<td>January 2013</td>
<td>Launch of the PDM system at ESO. All technical documentation for LPO and E-ELT was uploaded into the system.</td>
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<td><strong>March 2013</strong></td>
<td>PDM was introduced In Chile.</td>
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<td><strong>February 2014</strong></td>
<td>First projects started using the PDM working areas for E-ELT, Adaptive Optics Facility, Eris.</td>
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<tr>
<td><strong>July 2014</strong></td>
<td>4 Most and Moons got a working area and contractors were given access to the PDM.</td>
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<tr>
<td>October 2014</td>
<td>The PDM servers were transferred from BlueCielo EMEA data center to ESO premises in Germany.</td>
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<tr>
<td><strong>December 2014</strong></td>
<td>The number of BlueCielo Project Portal licenses increased for all ESO users.</td>
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Main Goals Of The ESO PDM System

- To provide a standard platform for all technical and project documentation at ESO.
- To facilitate collaborative working using the existing (multiple) ESO practices and allow for future improvements.
- Facilitate the exchange of documentation with partners and contractors.
- Facilitate the upload and archive of project documentation.
- No major product development needed during the implementation project.
- Goal is that more or less ESO PDM solution is based on standard product and configuration.
Benefits From ESO Co-operation To BlueCielo

- Major deal in Germany but manage by BlueCielo’s Finnish subsidiary.
  - ESO selected BlueCielo Project Portal (standard product) for ESO’s technical & project document management tool.
  - BlueCielo Project Portal is 100% web solution, used by ESO in Germany and Chile and ESO’s contractors.
- Contacts to German industry and research network.
- Possibility to expand business in Chile.
- Good reference customer for new BlueCielo prospects.
- Knowledge change between other BlueCielo customer
  - Reference visits & calls
- We can see that in the near feature BlueCielo can benefit also ESO’s feedback and improve Project Portal based on that.
Benefits From ESO Membership To Finnish Industry

- Finland became a member of the European Southern Observatory (ESO) on 7th July 2004.

- The Finnish Centre for Astronomy with ESO (FINCA) (started in 2010) is a national research institute for astronomical and astrophysical research in Finland. FINCA coordinates Finnish cooperation with ESO by networking into the ESO infrastructure and projects, etc..

- Academicals and research projects:
  - Completed Theses & Publications
  - Memberships in SOC/LOC of Conferences and Other Committees
  - Conference Presentations and Seminar Talks
  - Research Visits to Foreign Institutes and Hosts to Visitors to FINCA
  - R&D projects
  - Technology and knowledge transfer to Finland
  - Networking of Finnish research organizations
Commercial benefits are not well known and there is no exact data available at the moment. No return of investment known.

Tekes (the Finnish Funding Agency for Innovation) coordinate and help private companies. They coordinate also cooperation to ESA.

Examples from commercial deals between ESO and Finnish industry:

- YIT/Caverion, Facility Management, +5M EUR
- Kohonen&Partanen, Architect Services, +0,5M EUR
- BlueCielo ECM Solutions, Software & Services, +0,5M EUR

Several smaller commercial agreements but there is not data available.
Logistics Of Dealing With ESO

- After you have find right people and project/program, things will move forward. When we started we did direct phone call campaign to find right people.

- In the end the decision making process is centralized to few people.

- Business development can take time:
  - Requirements
  - Procurement / Rules
  - Budget

- ESO’s processes don’t differ from other international organizations and global companies.

- Be patient but active! Try to see long term goals!
Thank you!