



Providing EUDAT services to national customers

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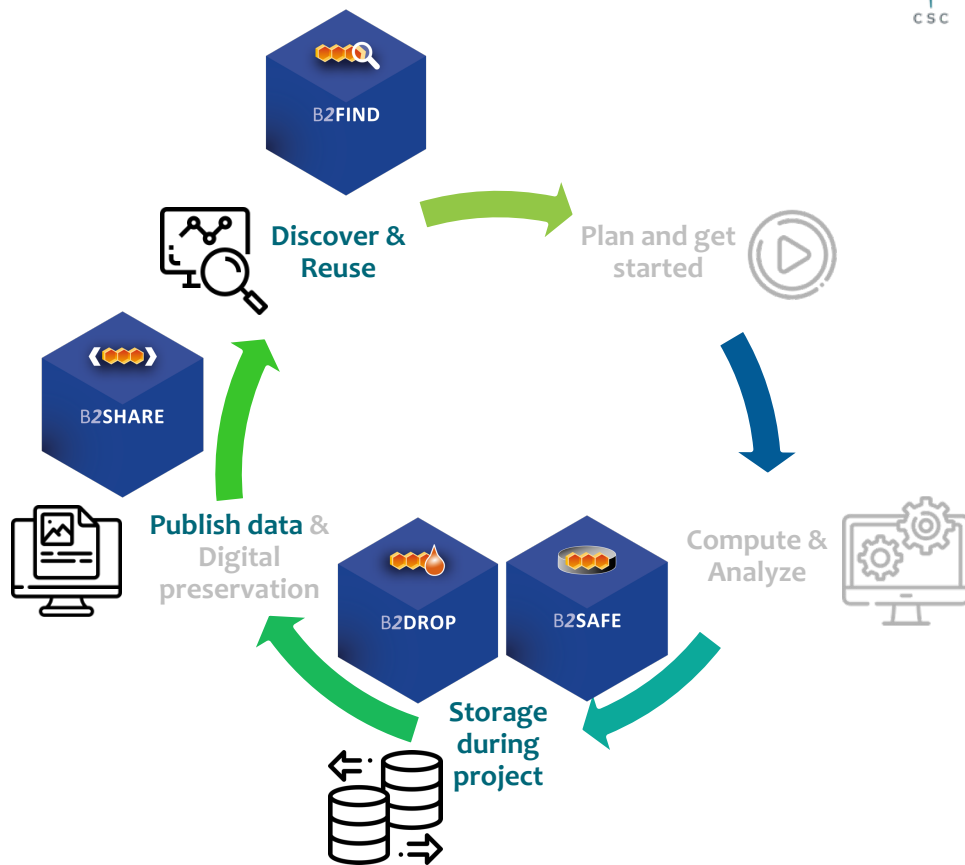
Contents

- CSC & EUDAT services
- Contract models
 - Deployment projects
 - Production services
 - Further development
 - Pilot projects
- Resourcing ICTP & people
- Discussion

EUDAT Services at CSC



- CSC is a **non-profit state enterprise**
 - Owned by state of Finland and Finnish HEIs
 - Limitations to outside sales and competing in open market
- Primary customers
 - Ministry of Education and culture and organizations in the field, HEIs, research institutes and public administration
- EUDAT at CSC & Finland
 - CSC provides EUDAT premium services for Finnish customers, mostly for special use cases
 - CSC also provides Fairdata.fi services for all Finnish HEIs for free, courtesy of Ministry of Education and Culture
- More information
<https://research.csc.fi/-/eudat-services>



CSC's current EUDAT customer cases

	B2SHARE	B2DROP	B2SAFE
EUDAT CDI (multiple communities)	public fair use		
A national research institute	premium		
Turku University of Applied Sciences (Turku AMK)		premium	
University of Helsinki (definite duration contract ending)	premium	premium	
Integrated Carbon Observation system (ICOS RI)			project funded
INAR RI Ecosystems (Institute of Atmospheric and Earth System Research)	pilot	pilot	
EuroFusion E-TASC Hel project			pilot

Tailoring and customer needs

- Storage capacity
- User management
- Metadata
- Harvesting & visibility/impact
- Branding and usability
- Integration support & consultation in data management policy



Productization – How to decide what to provide and offer?



Contract models - How to structure your service portfolio?

- Deployment project
- Production
- Further development
- Pilots
- What are basic customer types & needs?
- What can you offer scalably, repeatably, cost-effectively?
- How to “package” these as clear products?
- The temptation of tailoring
- How to position yourself with other service providers (within & without your own organization?)
 - Avoiding overlap
 - Collaboration & integration options
 - Direct contract or subcontracted through EUDAT Ltd.

Contract models – Deployment project

- **Deployment project**

- One-shot cost of deploying a service to production
- ICTP costs during project
- Labor costs

- **Production**

- **Further development**

- **Pilots**

- Customer onboarding – quick access to use experience
 - Important to keep workload estimates & schedule more reliable
 - Focus on repeatable B2Service “template” and limited tailoring options
 - Complicated deployment a sign of potential overreach
- Tailoring a selling point, but also a business risk
 - Repeatable templates: basic look & feel, adding new capacity, basic schema adjustments
 - New features & integrations are interesting work, and an opportunity
 - Often difficult to decide what NOT to offer – things that would break the service portfolio, or be unsustainable, or better offered by other services & providers
 - Note: Can be contractually separated to further development for risk management of both parties

Contract models - Production

- Deployment project
- **Production**
 - Yearly repeating basic cost of service
 - ICTP costs
 - Labor costs
- Further development
- Pilots
- Goal to create multi-year “until further notice” contracts
- Stability and predictability important for customer budgeting & service provider resource management
- Labor always more expensive than normal ICTP
- Risks in external dependencies, integration and life-cycle management

Contract models – Further development

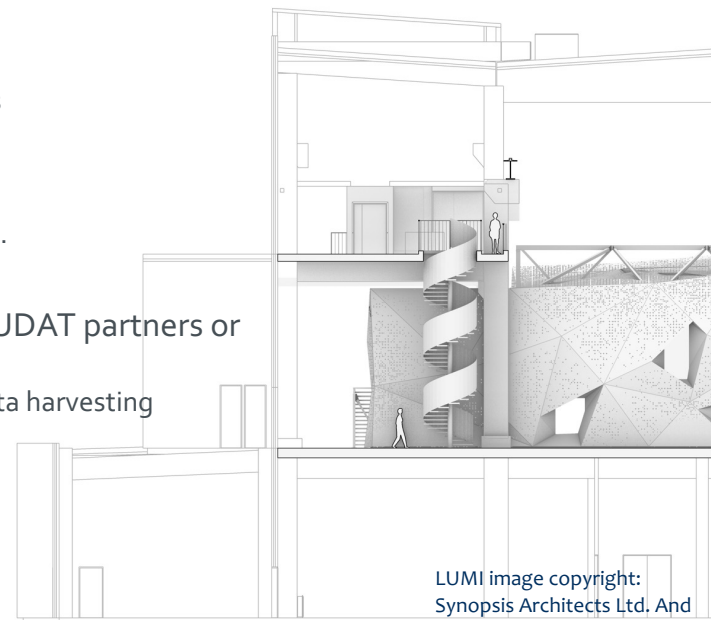
- Deployment project
- Production
- **Further development**
 - Yearly labor budget set by customer
 - Prioritized development goals with workload estimates
 - Progress tracked in development and/or quality meetings
- Pilots
- Managing expectations, resourcing, schedule flexibility
- Agile development – requires active customer participation
 - Customer capabilities differ
 - Provider consults design choices
 - How to say “no”: sustainable architecture, purpose and scope of service
- Scope is limited
 - Adjusting existing features
 - Creating new features
 - We encourage reusable features, but with deployment embargo to keep paying customer happy – community benefits reciprocal
- Future hopes: Collaboration with several customers

Contract models - Pilot

- Deployment project
- Production
- Further development
- **Pilots**
 - Limited time-frame, customer or project funded
 - Minimal costs: Basic deployment, lower SLA-targets
- Use cases
 - Evaluation of B2Service for potential contract
 - A platform for customer's research data management process development
 - Part of wider consultation projects
- Challenges
 - Maintaining time & support limits
 - "Not production, but..."

Resourcing ICTP: What you need & want to manage yourself?

- Providing services means maintaining a lot of infrastructure
- **Production** for customer facing services, production data
 - May include training, pilot & demo/test instances without production data, sometimes lower SLA targets
 - ~11 servers in total in this category
- **Development** & staging for internal use
 - One for each production service, and more for integration and new services/features
 - ~13 servers in total, more for short term use
- **Tools** (production & development) for managing production processes
 - database, deployment automation, secrets management, proxy, runner, bastion etc.
 - ~8 servers in total
- Dependencies to internal & external tools managed by other CSC teams, EUDAT partners or third parties
 - Datacenter, network, server virtualization & storage platform services, AAI, metadata harvesting
 - Monitoring, version management, wikis, ticketing systems etc.
 - Benefits of scale in platform services



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Resourcing people: Ensuring key skills

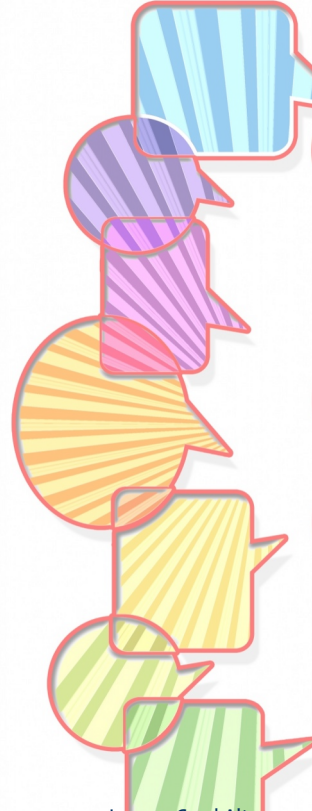
- Team: skillsets, time, collaboration
- Devops
 - B2Services and software stacks
 - Production and development tools
- Coordinators
 - Customer cases
 - EU-project coordination
 - Other services in related field
- Collaboration & support outside team – remember to ask for and offer help
 - B2service owners & product development
 - Customer relationship, customer solutions and sales support
 - CSC internal tools, processes and policies
 - Subcontracting a possibility for short term help, but maintain key skills within team
- Ever improving team
 - Recruitments and learning the ropes take time
 - Trainings, inhouse skillshare, EUDAT events & hackathons



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Seeds for discussion...

- Your home: Service provider organization
 - Company strategy – where do your services fit in?
 - Platform opportunities vary
 - Processes – an opportunity, a limitation and reciprocal improvement
 - Differences in legal status
- Lifecycle management
 - Services and processes built during many years in different EU-funded projects
 - EU-project funding not suitable for production – a challenge for stability
 - Technical debt
 - Exit strategy?
- Scalability and investment steps
 - When to invest in automation?
 - Scale up or scale out? – Growing clusters or multiplying instances?
 - Personnel resources and capabilities – training, recruitments etc.
- Customer & community collaboration
 - Community management process being improved
 - Customer events being planned
 - A venue for peer-support
 - Service feedback & prioritization of longer term development goals



Thanks!

More information:

www.eudat.eu

research.csc.fi/-/eudat-services



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