

# Proposal for a distributed climate data store for Copernicus

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ECMWF

# Requirements for the Climate Data Store (CDS)

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- Be distributed
- Reuse existing systems when possible
- ... But should not be a mere collection of heterogeneous systems:
  - The user should have a consistent view of all data and services available through the CDS

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Monitor Connectivity  
 HDMI  
 VGA  
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Monitor Screen Size  
 Up to 19"  
 20" - 21"  
 22" - 23"  
 24" - 25"  
 26" & Up

Avg. Customer Review  
★★★★☆ & Up  
★★★★☆ & Up  
★★★★☆ & Up  
★★★★☆ & Up

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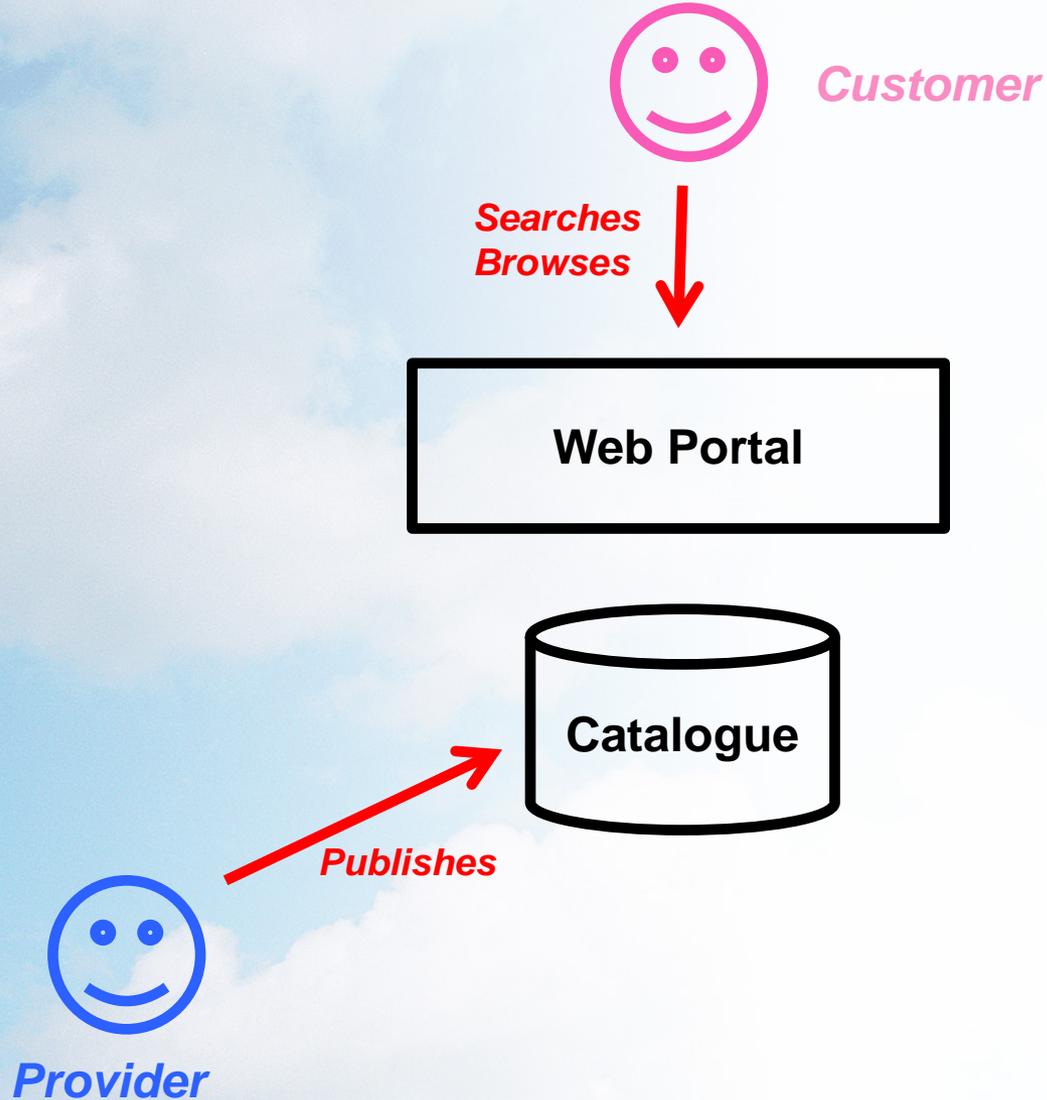
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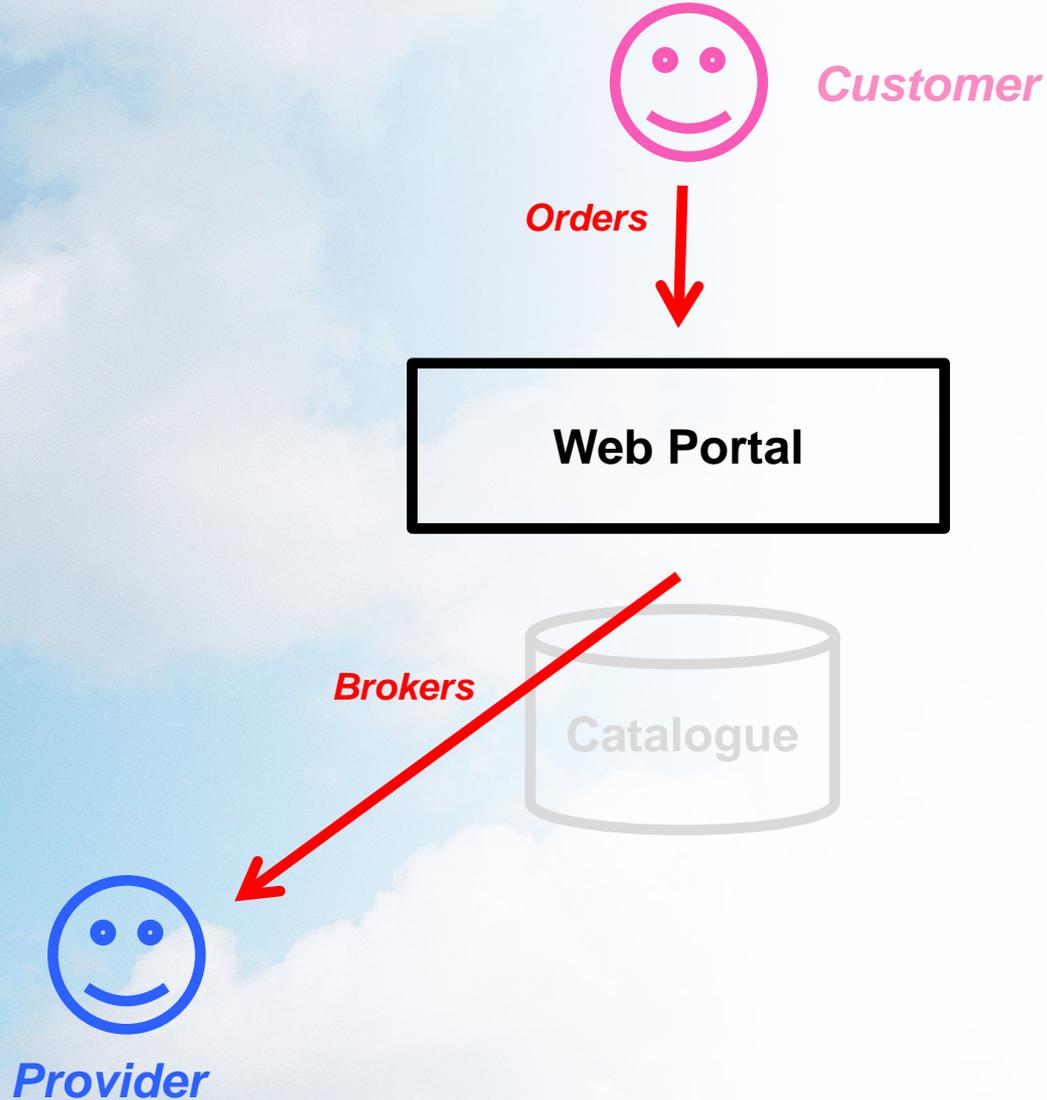
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Order in the next 10 minutes and get it by Wednesday, May 21.  
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★★★★☆ (880)  
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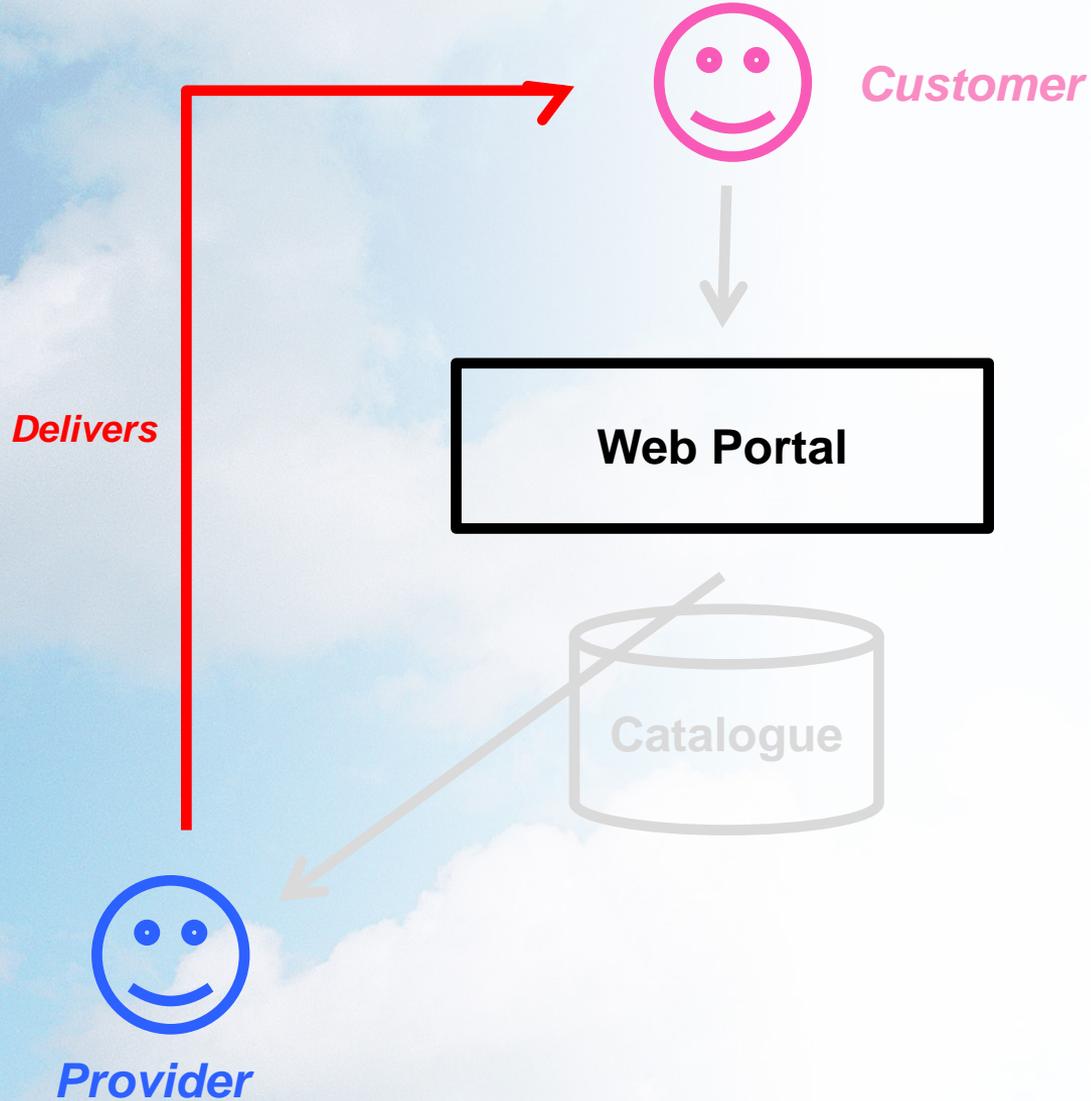
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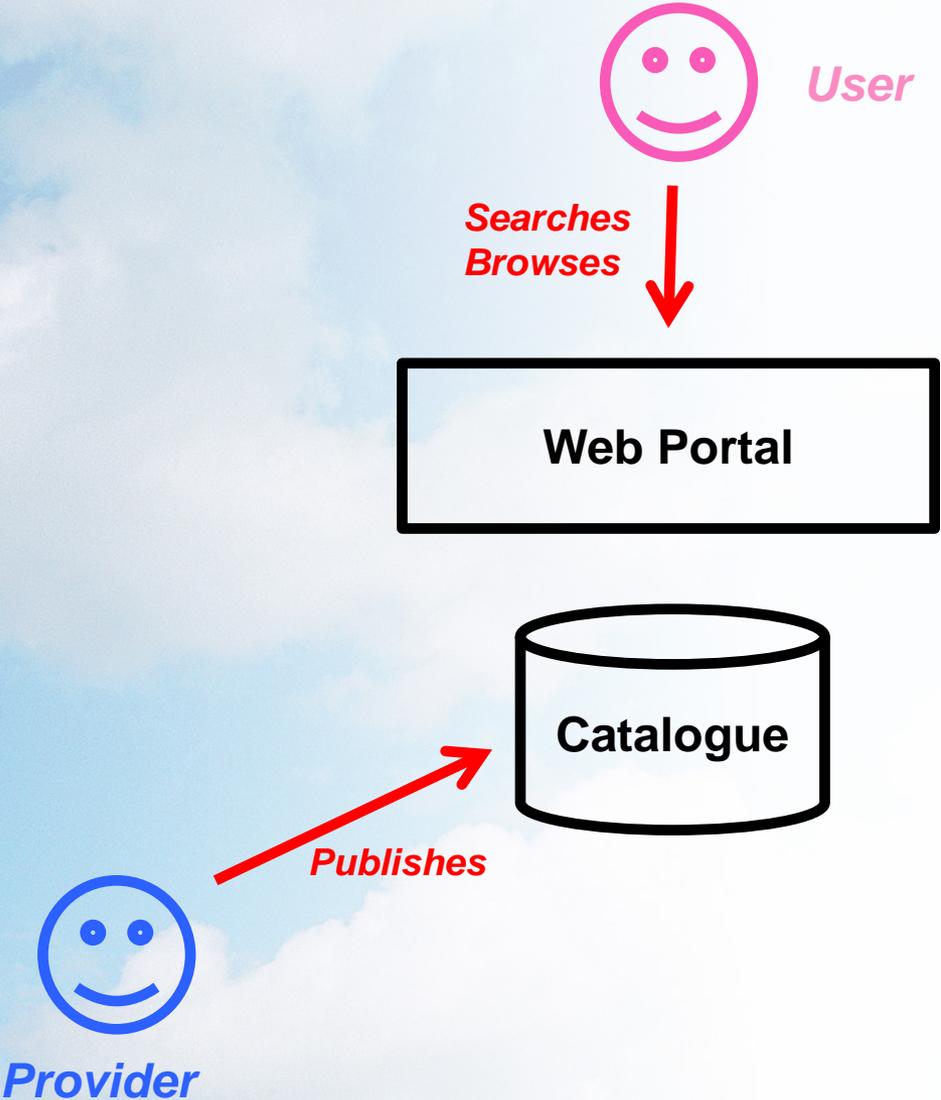
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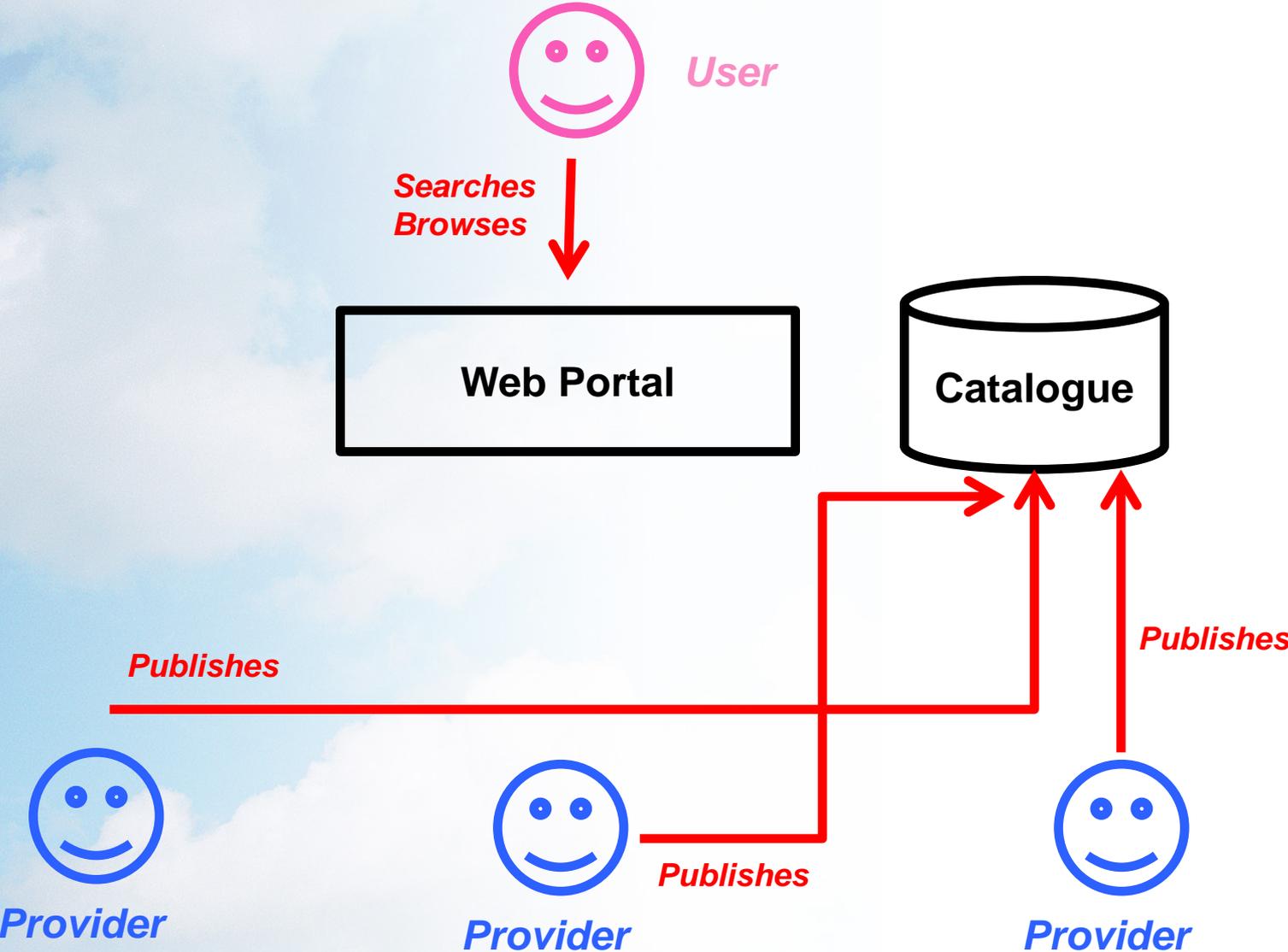
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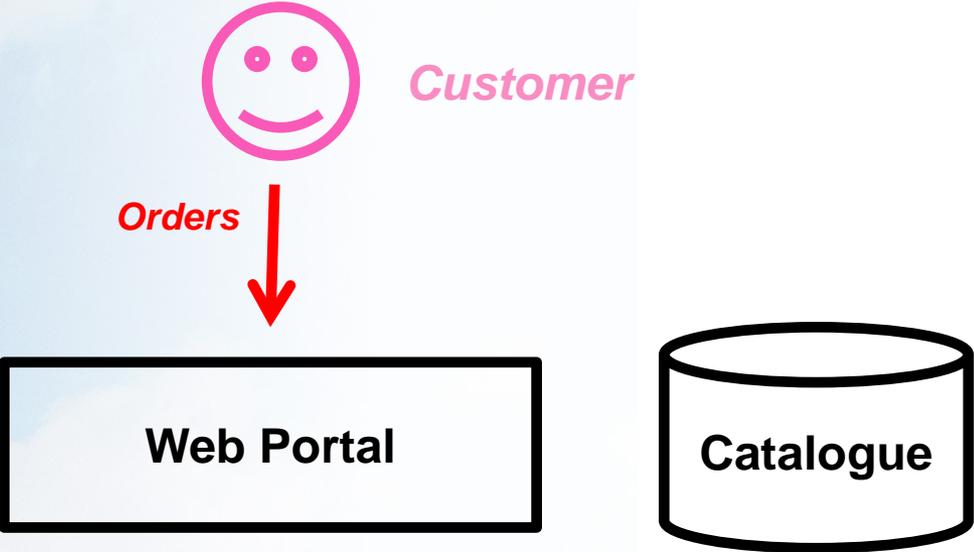
# Distributed Climate Store



# Distributed Climate Store



# Distributed Climate Store



*Provider*

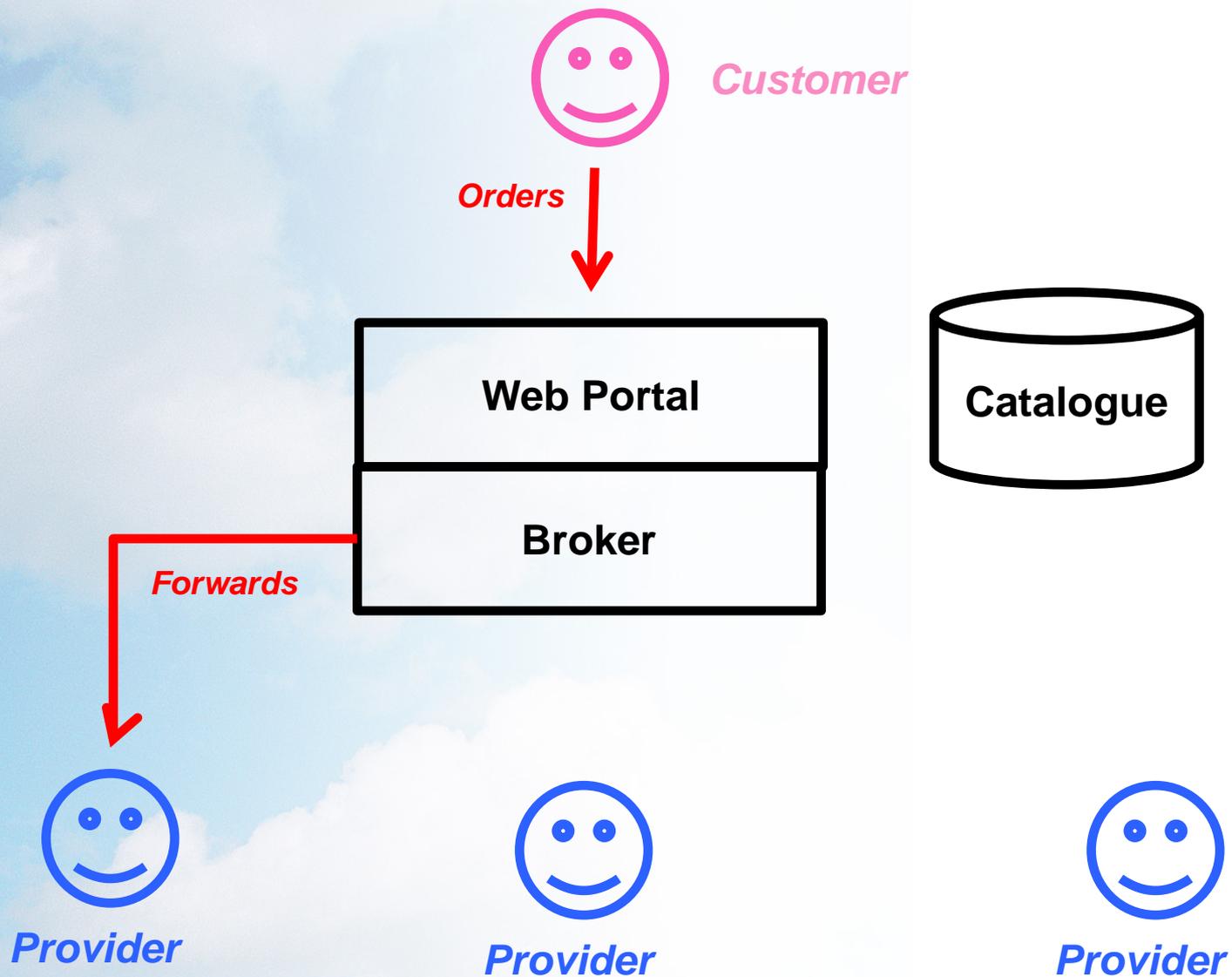


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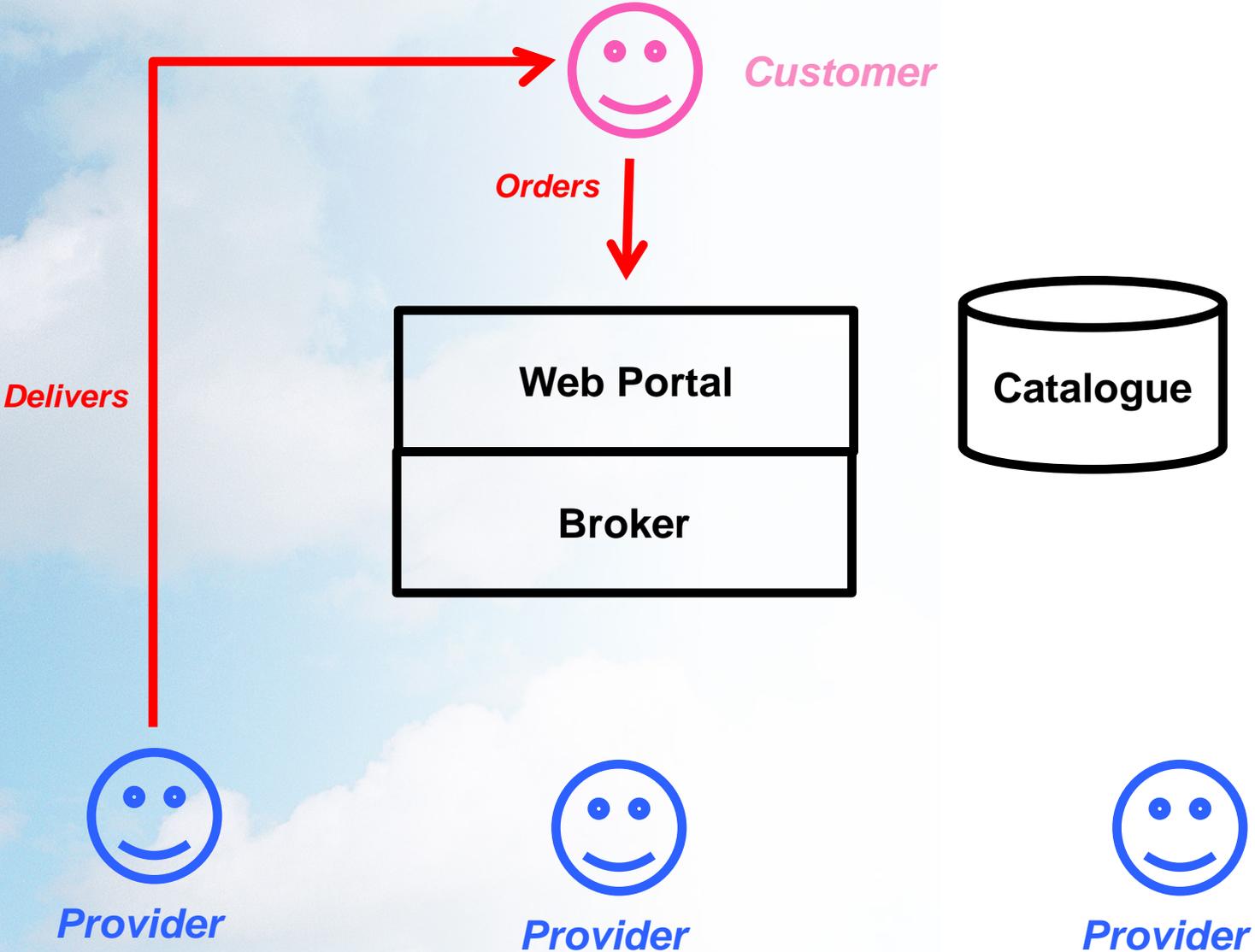


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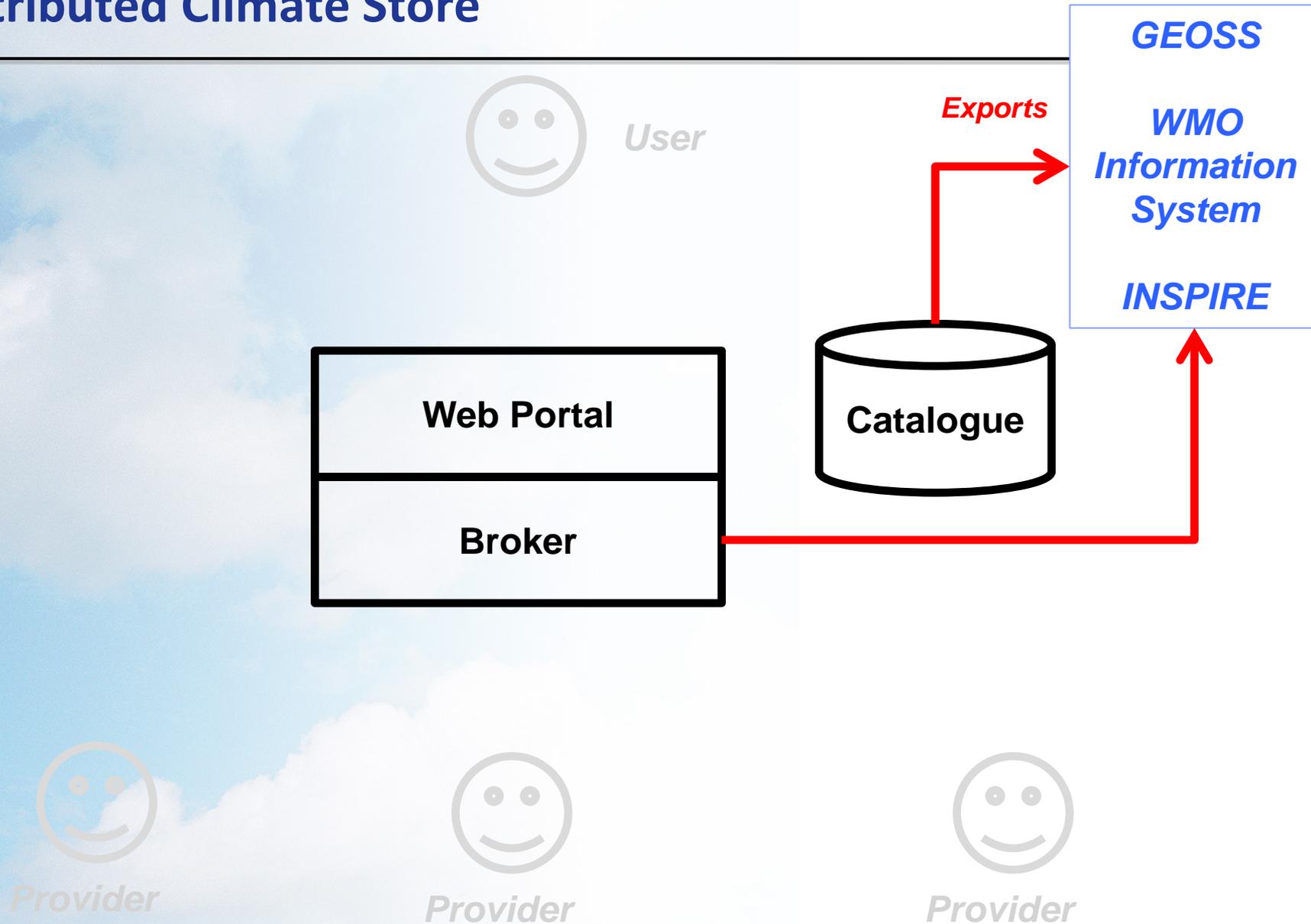
# Distributed Climate Store



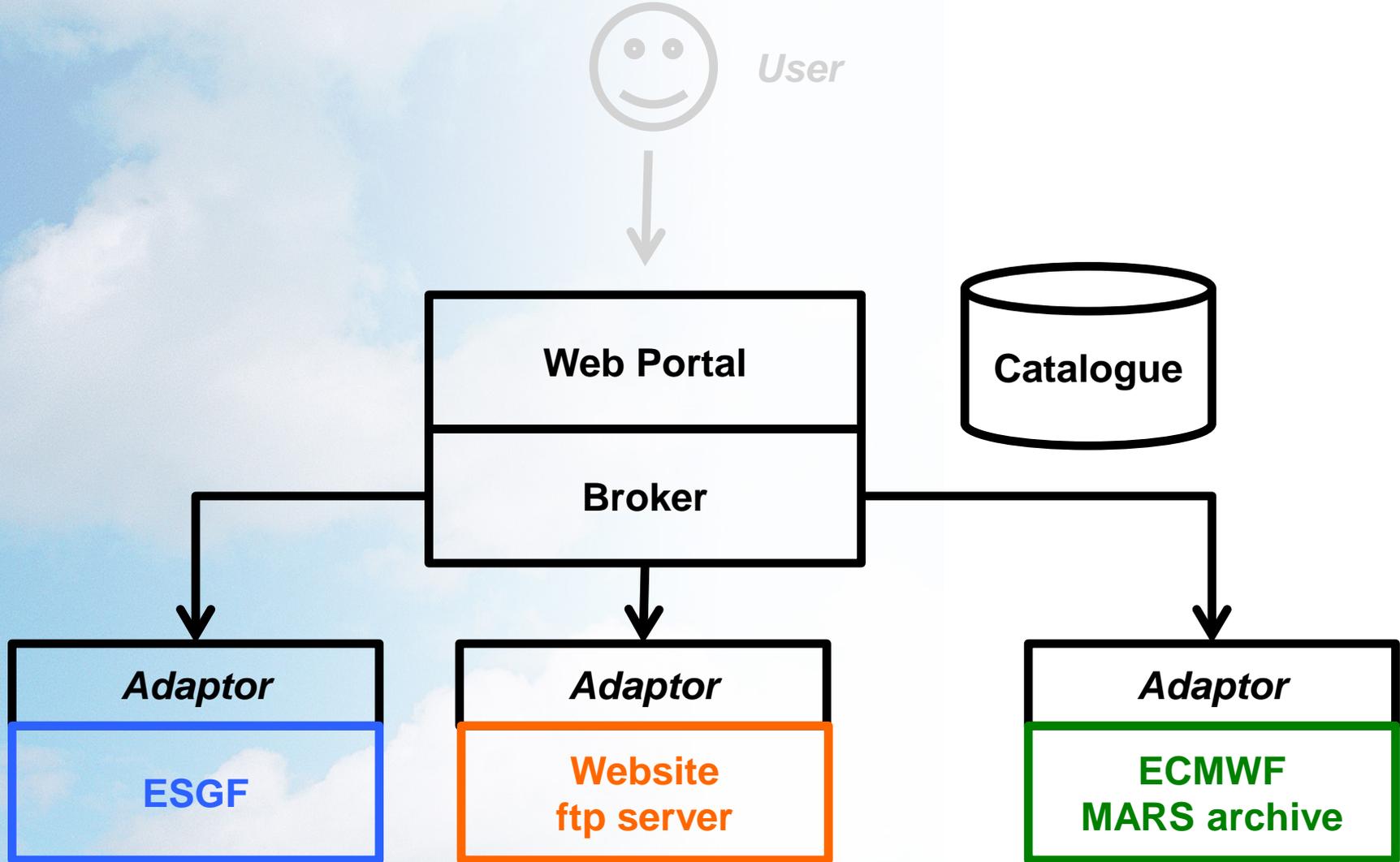
# Distributed Climate Store



# Distributed Climate Store



# Distributed Climate Store



# Climate Data Store

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- Adaptors are not limited to data provision
  - One can later build services (i.e. creation of on-demand derived products)
  - They will contribute to the “CCCS toolbox”
  - As for data, services are invoked by the broker
- ECMWF can host new services when no infrastructure exists

# Conclusion

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- The proposed architecture for the Climate Data Store (CDS) fulfils the two main requirements:
  - Be distributed
  - Reuse existing infrastructure when possible
- The CDS will ensure interoperability with other frameworks
  - WMO Information System (WIS) ECMWF is a certified WIS-DCPC
  - WMO Global Framework for Climate Services (WMO GFCS)
  - INSPIRE, GEOSS...
- Next step:
  - Review existing systems/software/EU projects that are relevant to the CDS
  - Perform a GAP analysis, with focus on operations
  - Develop/procure the missing parts