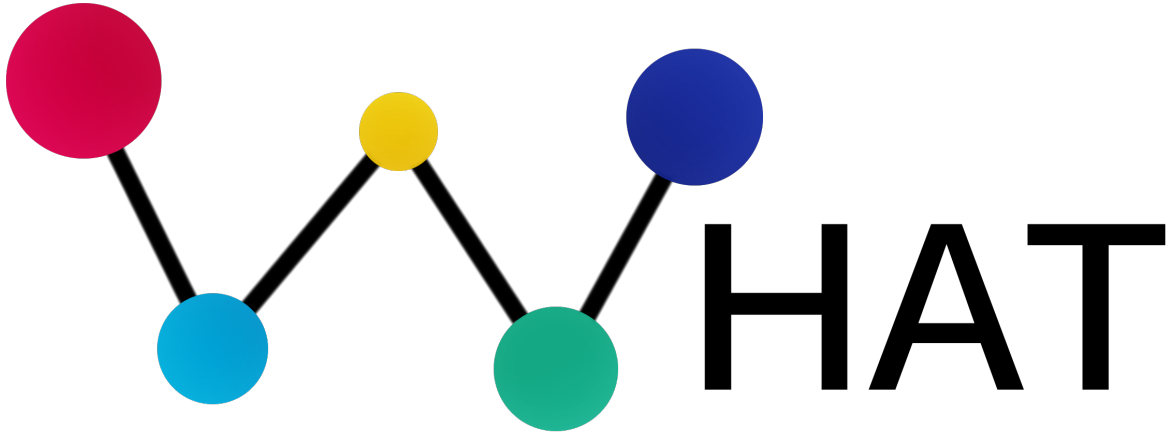


WareHouse Analyzing Tool

# Visualizing and Statistically Analyzing Access Behavior to Scientific Databases

# task

- process data from SkyServer.org server log files
- save data in database
- compute charts

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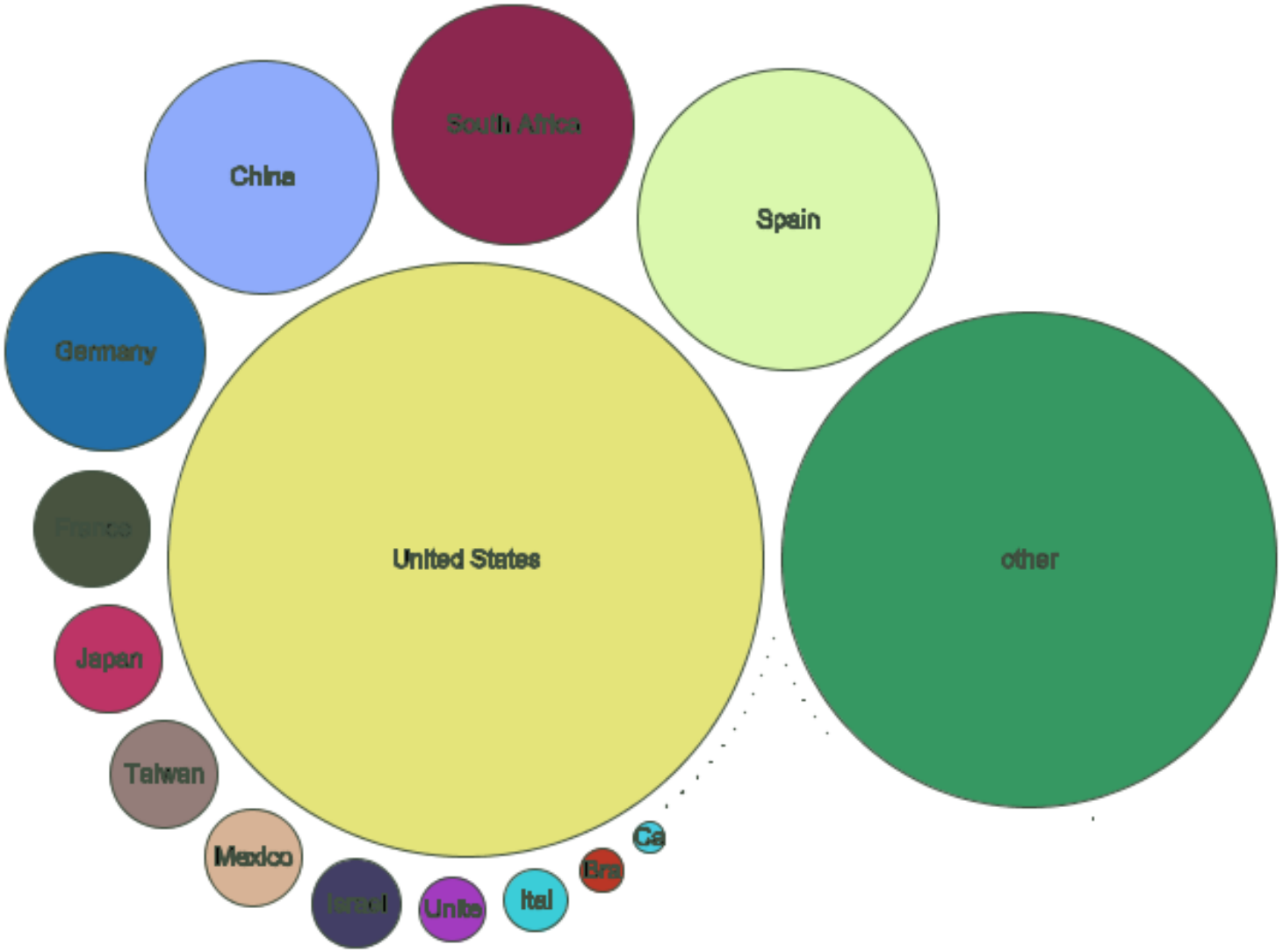
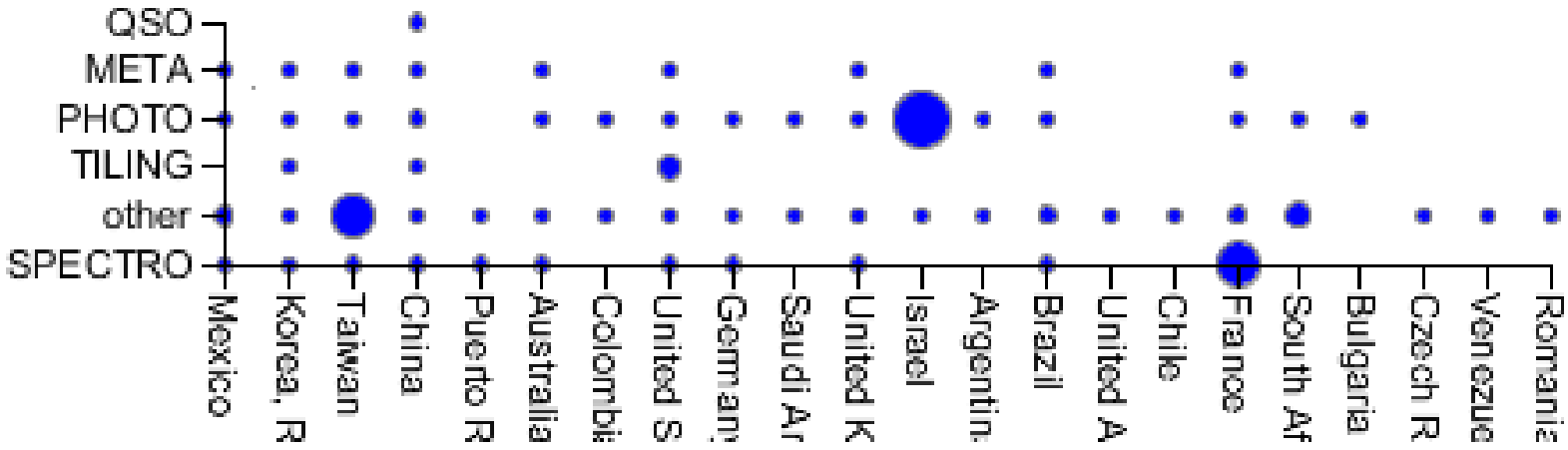
# CSV

```
YY,MM,DD,HH,MI,SS,clientIP,server,dbname,elapsed,busy,rows,statement
2012,9,30,23,59,57,66.249.73.42,SDSSSQL023,BestDR7,0.066,0,1,select * from PhotoObjAll where objId=0x082805c640430159
2012,9,30,23,59,55,66.249.76.115,SDSS3J,BESTDR9,0.036,1E-3,1,select * from PhotoObjAll where objId=0x112d0e79a0a700df
2012,9,30,23,59,55,66.249.73.42,SDSSSQL023,BestDR7,0.06,1E-3,1,select * from PhotoObjAll where objId=0x082810706096005d
2012,9,30,23,59,52,66.249.76.115,SDSS3D,BESTDR8,0.046,0,1,select * from PhotoObjAll where objId=0x112d1012407507a1
2012,9,30,23,59,50,66.249.76.115,SDSS3D,BESTDR8,0.036,0,1,select * from Field where fieldId=0x112d101240750000
2012,9,30,23,59,49,66.249.71.122,SDSS2A,BESTDR7,3E-3,0,1,select * from PhotoTag where objId=0x082c02f4618a00b6
2012,9,30,23,59,46,66.249.76.115,SDSS3D,BESTDR8,6E-3,0,1,select * from PhotoObjAll where objId=0x112d0b94610f0027
2012,9,30,23,59,45,66.249.76.115,SDSS3J,BESTDR9,0.023,1E-3,1,select * from PhotoTag where objId=0x112d0474a08700d3
2012,9,30,23,59,43,66.249.73.42,SDSSSQL023,BestDR7,0.036,1E-3,1,select * from Field where fieldId=0x0828088e40f40000
2012,9,30,23,59,43,66.249.76.115,SDSS3D,BESTDR8,0.033,0,1,select * from sppLines where specObjId=0x0f1c4b8a4c006800
2012,9,30,23,59,42,66.249.73.243,SDSSSQL014,BestDR5,0.046,0,1,select * from SpecObjAll where specObjId=0x018eca4d4d400000
2012,9,30,23,59,41,66.249.73.42,SDSSSQL023,BestDR7,0.06,0,1,select * from PhotoZ where objId=0x08281a89608003a3
2012,9,30,23,59,40,66.249.76.115,SDSS3D,BESTDR8,0.036,0,1,select * from Field where fieldId=0x112d0ace20200000
2012,9,30,23,59,39,66.249.71.122,SDSS2A,BESTDR7,0.02,0,1,select * from PhotoTag where objId=0x08280a66613f00a9
2012,9,30,23,59,37,66.249.76.115,SDSS3D,BESTDR8,0.04,0,1,select * from PhotoObjAll where objId=0x112d011f403000bf
2012,9,30,23,59,36,66.249.76.57,JHU-SDSS002,BestDR5,0.013,0,1,select * from PhotoZ where objId=0x082c02f4a306011f
2012,9,30,23,59,34,66.249.76.115,SDSS3D,BESTDR8,0.036,0,1,select * from sppLines where specObjId=0x0b0c080881006800
2012,9,30,23,59,33,66.249.73.42,SDSSSQL023,BestDR7,0.063,1E-3,1,select * from Field where fieldId=0x08280bada0140000
2012,9,30,23,59,32,66.249.76.115,SDSS3D,BESTDR8,0.033,0,1,select * from PhotoObjAll where objId=0x112d0103a0ef01f5
2012,9,30,23,59,31,66.249.76.115,SDSS3D,BESTDR8,10E-3,0,1,select * from galSpecIndx where specObjId=0x04709c0797006800
2012,9,30,23,59,28,66.249.76.115,SDSS3D,BESTDR8,0.036,0,1,select * from sppLines where specObjId=0x049c95c7c1006800
2012,9,30,23,59,26,66.249.76.57,JHU-SDSS002,BestDR5,0,0,36,select * from SpecLineIndex where specObjId=0x0197ca6c47400000
2012,9,30,23,59,26,66.249.76.115,SDSS3D,BESTDR8,0.023,0,1,select * from sppLines where specObjId=0x14c81b8b06006800
2012,9,30,23,59,24,66.249.76.115,SDSS3D,BESTDR8,0.023,0,1,select * from sppLines where specObjId=0x14c80bcb06006800
2012,9,30,23,59,21,66.249.73.243,SDSSSQL014,BestDR5,0.1,0,1,select * from SpecObjAll where specObjId=0x018eca4d59000000
```

# bubble chart



# scatterplot + bubble chart



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Find out:

- what parts of your servers were accessed,
- when they were accessed,
- and from where in the world

use e.g. to create a better user expierience

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# main functions

WHAT - **W**are**H**ouse **A**nalyzing **T**ool

- process server log files
- and load data into database
- choose different chart types
- compute charts with customizable parameters
- export charts

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# project demonstration

# client - server model

reasoning:

- amount of data
- already present server infrastructure, most likely

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- not OS dependant
- device independant
- possibility to provide easy access to others

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- configurable (not only SkyServer)
- simple user interface
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# extendability + future development

extendability:

- more languages
- extend charts/add new ones

future development:

- support for olap server
- more admin functions, e.g. order charts
- more export formats
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open source: https://github.com/Gruppe14/KIT-PSE
development documents: https://github.com/Gruppe14/KIT-PSE-Docs
including this presentation.

JVM version:
https://www.dropbox.com/sh/c0zm0f0vtli0kxy/l2Ahm8PRB4/KIT-PSE

HAT

Questions?

# end

Thanks for listening!