

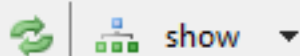
Prezentacja pokazuje uruchomienie programu do obliczeń statystycznych R w graficznym kliencie UNICORE'a - UNICORE Rich Client (URC).

Podstawowe informacje dotyczące uruchomienia zadania znaleźć można w prezentacji: Uruchomienie zadania Script.



UNICORE

Grid Browser



Grid

PLGridRegistry

Workflow engine at alces

ICM-HALO

Global storage at alces

W zakładce: Grid Browser klikamy
prawym przyciskiem myszki na
nazwie wybranego systemu
docelowego.

Navigator Keystore Truststore

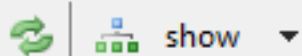


alias	CA's common name
polish grid ca	polish grid ca



UNICORE

Grid Browser



- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - Global storage at alces.icm.edu.pl

Navigator Keystore Truststore



alias	CA's common name
polish grid ca	polish grid ca



UNICORE

Grid Browser



- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM
 - Glo

- add Registry
- configure terminal connection
- create job
- details
- map to security profile
- open terminal
- refresh

Aby utworzyć nowe zadanie wybieramy opcję: create job.

Navigator keystore truststore

alias	CA's common name
polish grid ca	polish grid ca

UNICORE Rich Client

File Edit Window Help

UNICORE

Grid Browser

- Grid
 - PLGridRegistry
 - Workflow engine at alces
 - ICM-HALO
 - Global storage at alces.ic

Navigator Keystore Trustst

alias

polish grid ca

executing request: (0%)

Job Creation

Select application

Choose an application to be run on the target system when the job is executed.

- Generic v.2.0
- Script v.2.0

W oknie: Job Creation wypisane są, zainstalowane na wybranym węźle, aplikacje posiadające interfejs graficzny przeznaczony do pracy w kliencie środowiska UNICORE (gridbeany).

Widoczne są te aplikacje, dla których gridbean został ściągnięty na lokalną maszynę. Do pobierania gridbeanów służy przycisk: Download Applications.

Download Applications

< Back Next > Finish Cancel

UNICORE Rich Client

File Edit Window Help

UNICORE

Grid Browser

Grid

- PLGridRegistry
 - Workflow engine at alces
 - ICM-HALO
 - Global storage at alces.ic

Navigator Keystore Trustst

alias

polish grid ca

executing request: (0%)

Job Creation

Select application

Choose an application to be run on the target system when the job is executed.

- Generic v.2.0
- Script v.2.0

Download Applications

Download applications from an application server.

< Back Next > Finish Cancel

Background window content

UNICORE Rich Client

File Edit Window Help

UNICORE

Grid Browser

Grid

- PLGridRegistry
 - Workflow engine at alces
 - ICM-HALO
 - Global storage at alces.ic

Navigator Keystore Trustst

alias

polish grid ca

executing request: (0%)

Job Cr Available applications

Select

Choose

Generic

Script v

Download new or updated applications:

BLAST version 1.0 (size: 32 kB)

ClustalW version 2.12 (size: 17 kB)

R_Plugin version 1.0 (size: 1591 kB)

OK Cancel

Download Applications

< Back Next > Finish Cancel

Wybieramy: R_Plugin, klikamy przycisk: OK i czekamy na ściągnięcie interfejsu dla aplikacji na lokalną maszynę.

UNICORE Rich Client

File Edit Window Help

UNICORE

Grid Browser

Grid

- PLGridRegistry
 - Workflow engine at alces
 - ICM-HALO
 - Global storage at alces.ic

Navigator Keystore Trustst

alias

polish grid ca

executing request: (0%)

Job Cr Available applications

Select

Choose

Generic

Script v

Download new or updated applications:

BLAST version 1.0 (size: 32 kB)

ClustalW version 2.12 (size: 17 kB)

R_Plugin version 1.0 (size: 1591 kB)

OK Cancel

< Back Next > Finish Cancel

Download Applications

UNICORE Rich Client

File Edit Window Help

UNICORE

Grid Browser

Grid

- PLGridRegistry
 - Workflow engine at alces
 - ICM-HALO
 - Global storage at alces.ic

Navigator Keystore Trustst

alias

polish grid ca

executing request: (0%)

Job Creation

Select application

Choose an application to be run on the target system when the job is executed.

- Generic v.2.0
- R_Plugin v.1.0**
- Script v.2.0

Gdy R_Plugin pojawi się w spisie naszych aplikacji, zaznaczamy go i zatwierdzamy wybór przyciskiem: Finish

Download Applications

< Back Next > Finish Cancel

UNICORE Rich Client

File Edit Window Help

UNICORE

Grid Browser

Grid

- PLGridRegistry
 - Workflow engine at alces
 - ICM-HALO
 - Global storage at alces.ic

Navigator Keystore Trustst

alias

polish grid ca

executing request: (0%)

Job Creation

Select application

Choose an application to be run on the target system when the job is executed.

- Generic v.2.0
- R_Plugin v.1.0**
- Script v.2.0

Download Applications

< Back Next > Finish Cancel

Background window content, partially obscured.



UNICORE

Otwarty został interfejs
graficzny dla programu R.

Grid Browser

- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - Global storage at alces.icm.edu.pl

Navigator Keystore Truststore

alias	CA's common name
polish grid ca	polish grid ca

R_Plugin

JobName: R_Plugin

File Edit

New File

Arguments to script

Upload files

Browse

Remove

R

Files

Variables

Resources



Grid B

Gr

PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Dwukrotne kliknięcie na belkę pozwala powiększyć okno na cały ekran, a następnie przywrócić do poprzedniego rozmiaru.

Navigator Keystore Truststore

alias

CA's common name

polish grid ca

polish grid ca

R_Plugin

JobName: R_Plugin

File Edit

New File

Arguments to script

Upload files

Browse

Remove

R

Files

Variables

Resources



UNICORE

R_Plugin X

JobName: R_Plugin

File Edit

New File

Arguments to script

Upload files

Browse

Remove

R

Files

Variables

Resources



JobName: R_Plugin

Enter Task Name

W polu: JobName zmienić
możemy nazwę zadania.

New File

Arguments to script

Upload files

Browse

Remove



UNICORE

R_Plugin X

JobName: **File** **Edit**

I

New File

Arguments to script

Upload files

Browse

Remove

R

Files

Variables

Resources



JobName: Zada

File Edit

Poniżej pola z nazwą znajduje się edytor, do którego wpisać można polecenia R. Za pomocą menu File i Edit można m.in. otworzyć napisany wcześniej skrypt lub zapisać zawartość okna.

New File

Arguments to script

Upload files

Browse

Remove

JobName: File Edit

```
d1 <- dane$Dat1
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

New File

Arguments to script

Upload files

Browse

Remove

JobName: **File** **Edit**New Ctrl-NOpen... Ctrl-OSave Ctrl-S

Save As...

hist (d)

d

summary (d)

New File

Arguments to script

Upload files

Browse

Remove

JobName: **File Edit**

```
d1 <- dane$Dat1
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

New File

Arguments to script

W polu: Arguments to script wpisać możemy ewentualne parametry wymagane przez skrypt.

Upload files

Browse

Remove

JobName: File Edit

```
d1 <- dane$Dat1
d2 <- dane$Dat2
hist(d1)
hist(d2)
```

Okno: Upload files pozwala wskazać i wysłać na zdalną maszynę potrzebne pliki z danymi. W przypadku tej prezentacji jest to jeden plik: data.txt. Znajduje się on w folderze Dane.

Upload files

Browse

Remove

JobName: **File Edit**

```
d1 <- dane$Dat1
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

New File

Arguments to script

Upload files



UNICORE

*R_Plugin

JobName: Za

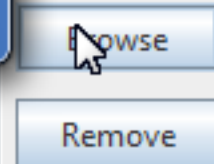
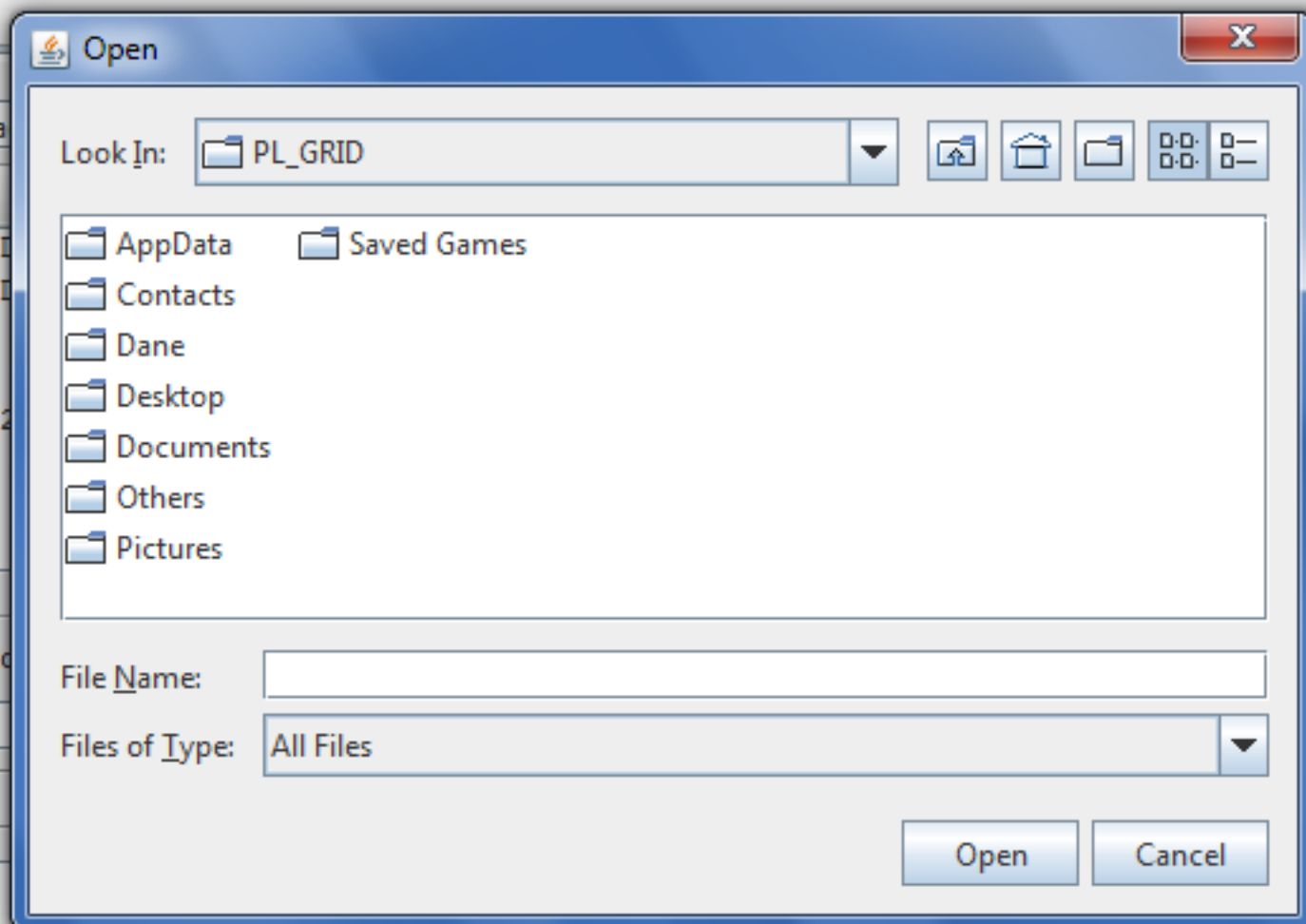
File Edit

```
d1 <- dane$I
d2 <- dane$I
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

New File

Arguments to

Upload files





JobName: Za

File Edit

```
d1 <- dane$I
```

```
d2 <- dane$I
```

```
hist(d1)
```

```
hist(d2)
```

```
d <- d1 + d2
```

```
hist(d)
```

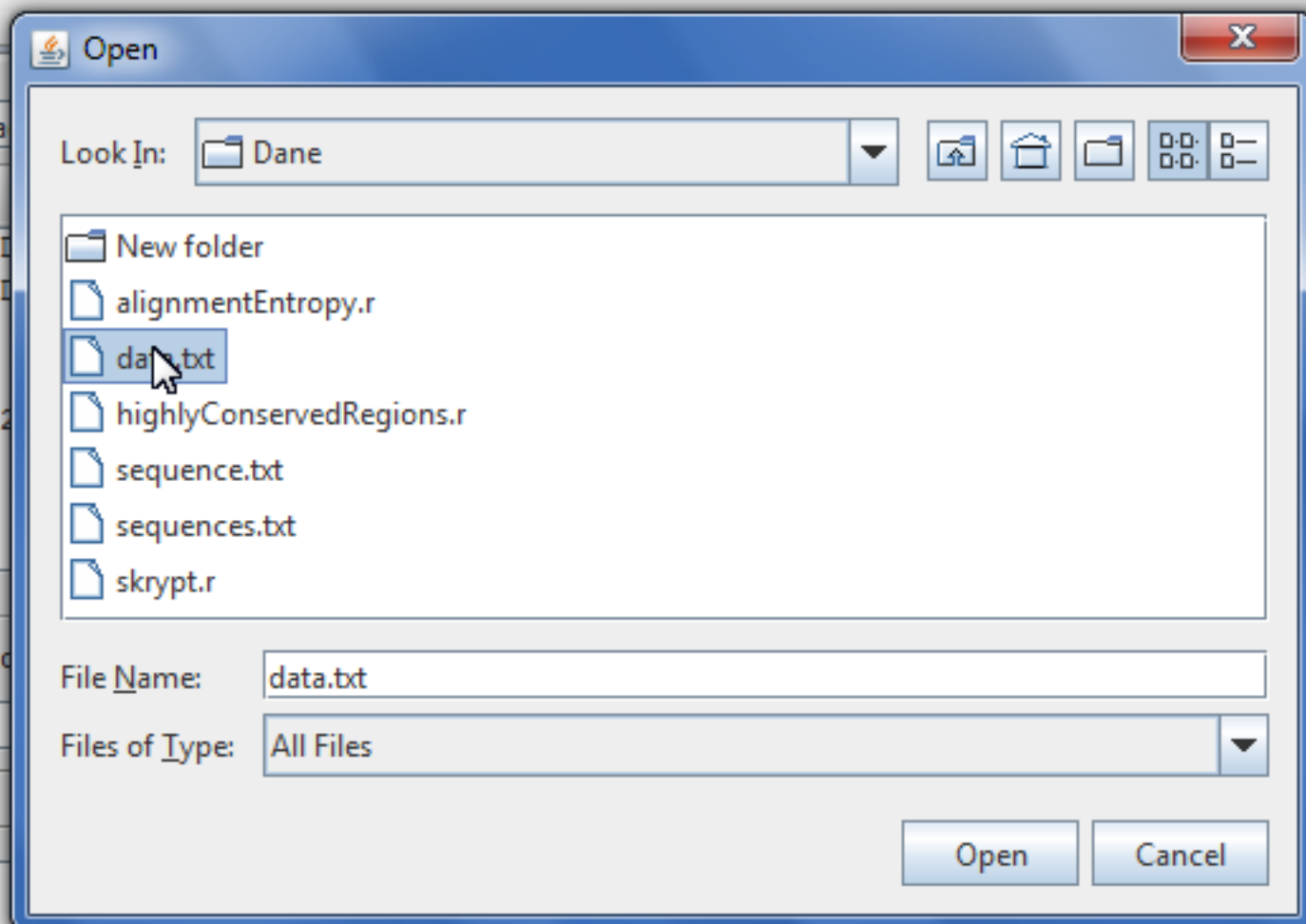
```
d
```

```
summary(d)
```

New File

Arguments to

Upload files



Browse

Remove



UNICORE

*R_Plug

JobName: Zadanie_R

File Edit

```
d1 <- dane$Dat1
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

New File

Arguments to script

Upload files

C:\Users\PL_GRID\Dane\data.txt

Browse

Remove

R

Files

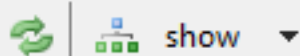
Variables

Resources



UNICORE

Grid Browser



Grid

PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Navigator Keystore Truststore



alias	CA's common name
polish grid ca	polish grid ca

*R_Plugin X

JobName:

File Edit

```
d1 <- dane$Dat1
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
```

New File

Arguments to script

Upload files

Browse

Remove

R

Files

Variables

Resources



Następnym krokiem jest wysłanie przygotowanego zadania do wykonania na Gridzie.

Grid

PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

alias	CA's common name
polish grid ca	polish grid ca

JobName:

File Edit

```
d1 <- dane$Dat1
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
```

New File

Arguments to script

Upload files

Browse

Remove

R

Files

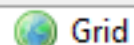
Variables

Resources



UNICORE Submit

Grid Browser



Grid

PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Navigator Keystore Truststore

alias

CA's common name

polish grid ca

polish grid ca

*R_Plugin X

JobName: Zadanie_R

File Edit

```
d1 <- dane$Dat1
```

```
d2 <- dane$Dat2
```

```
hist(d1)
```

```
hist(d2)
```

```
d <- d1 + d2
```

```
hist(d)
```

```
d
```

New File

Arguments to script

Upload files

C:\Users\PL_GRID\Dane\data.txt

Browse

Remove

R

Files

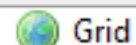
Variables

Resources



UNICORE

Grid Browser



Grid

PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Navigator

Keystore

Truststore

alias	CA's common name
polish grid ca	polish grid ca

*Zadanie_R

Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Client

Arguments to script

Upload files

Browse

Remove

R

Files

Variables

Resources



UNICORE

Grid B

Po zakończeniu wykonywania zadania, pobieramy jego wyniki.

show

Grid

PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Navigator Keystore Truststore

alias	CA's common name
polish grid ca	polish grid ca

*Zadanie_R Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Client

Arguments to script

Upload files

Browse

Remove

R

Files

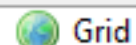
Variables

Resources



UNICORE Fetch output files

Grid Browser



Grid

PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Navigator

Keystore

Truststore

alias	CA's common name
polish grid ca	polish grid ca

*Zadanie_R

Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Clie

Arguments to script

Upload files

Browse

Remove

R

Files

Variables

Resources

UNICORE Rich Client

File Edit Window Help

UNICORE

Grid Browser

Grid

- PLGridRegistry
- Workflow engine
- ICM-HALO
- Global storage a

Navigator Keystore

alias

polish grid ca

Selection Needed

Select files for download

- stdout (267 bytes)
- stderr (0 bytes)
- Rplots.pdf (7119 bytes)

Select All Deselect All

Download files to:

C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Client-6.3.0\workspace\R_Plugin@ Browse

OK Cancel

Z listy utworzonych plików wybieramy te, które chcemy wyświetlić. W tym przypadku wybrane zostaną: plik ze standardowym wyjściem, plik z błędami (pusty: 0 bajtów) oraz plik graficzny zawierający wygenerowane wykresy. Wybór zatwierdzamy przyciskiem: OK.

24-14 (finished)

9-21 12-24-14

Client-6.3.0\UNICORE-Clie

Browse

Remove



UNICORE

Grid Browser

Grid

PLGridRegistry

Workflow engine

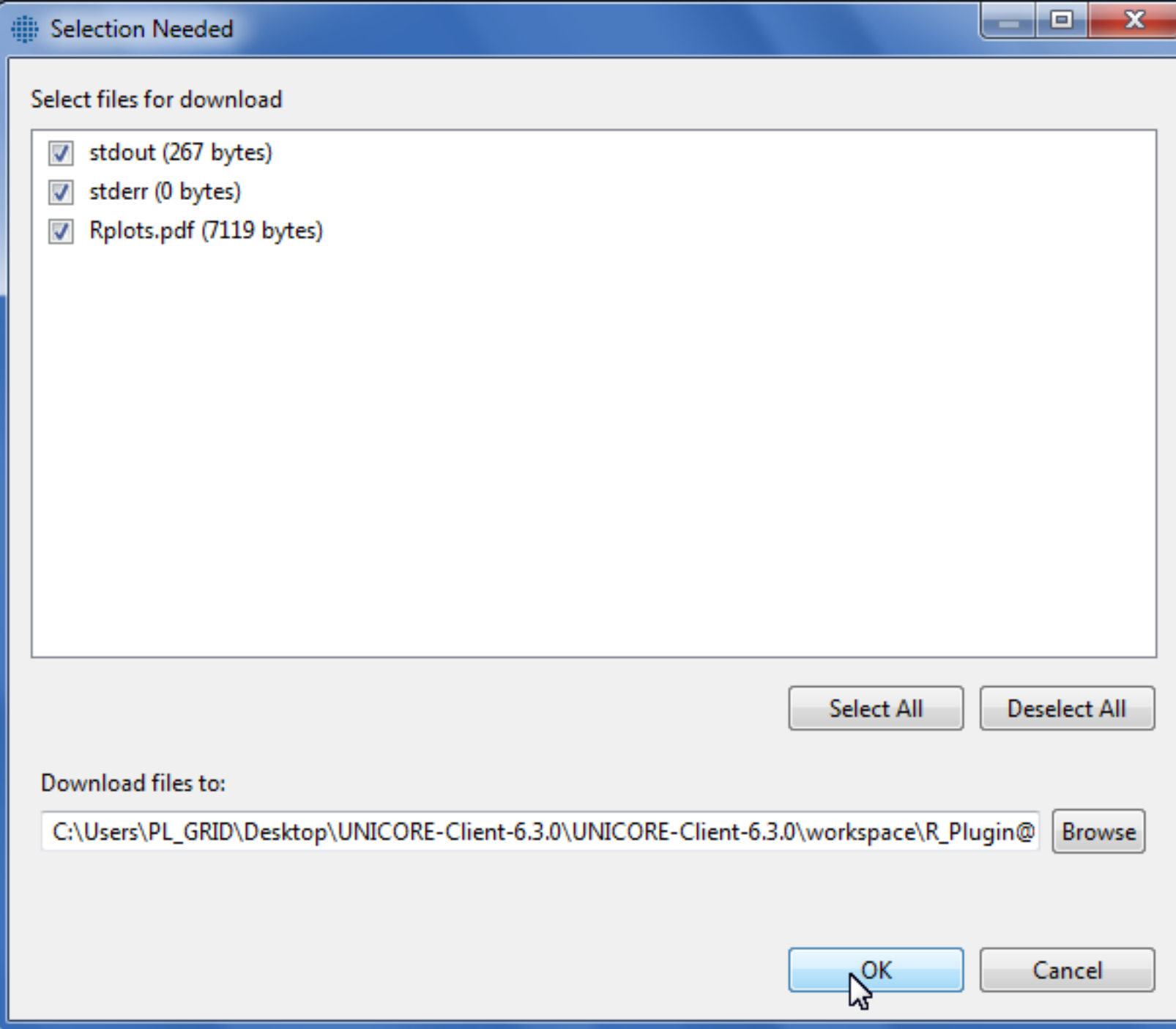
ICM-HALO

Global storage a

Navigator Keystore

alias

polish grid ca



-24-14 (finished) X

9-21 12-24-14

Client-6.3.0\UNICORE-Clie

Browse

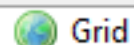
Remove





UNICORE

Grid Browser



Grid

PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Navigator

Keystore

Truststore

alias

CA's common name

polish grid ca

polish grid ca

Fetch outcome for : (95%)



*Zadanie_R

Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Client

Arguments to script

Upload files

Browse

Remove

R

Files

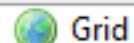
Variables

Resources



UNICORE

Grid Browser



Grid

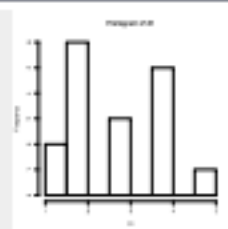
PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Navigator Keystore Truststore Output for Job Zada...



<<<

<<

1

of 3

>>

>>>

Save

PLOTS

Stdout

Stderr

Log

*Zadanie_R

Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Clie

Arguments to script

Upload files

Browse

Remove

R

Files

Variables

Resources



UNICORE

Grid Browser

Grid

PLGridRegistry

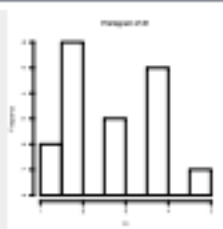
Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Otwarta została zakładka z
wynikami zadania.

Navigator Keystore Truststore Output for Job Zada...



<<< << 1 of 3 >> >>> Save

PLOTS Stdout Stderr Log

*Zadanie_R Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Clie

Arguments to script

Upload files

Browse

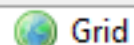
Remove

R Files Variables Resources



UNICORE

Grid Browser



Grid

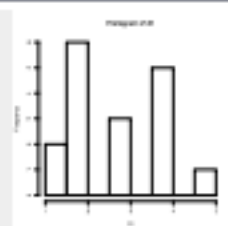
PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Navigator Keystore Truststore Output for Job Zada...



Wyświetlać
możemy kolejne z
wygenerowanych
wykresów.

<<

<<

1

of 3

>>

PLOTS

Stdout

Stderr

Log

*Zadanie_R

Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Clie

Arguments to script

Upload files

Browse

Remove

R

Files

Variables

Resources



UNICORE

Grid Browser



Grid

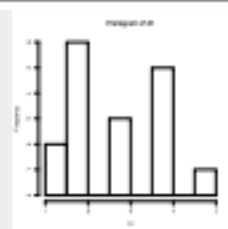
- PLGridRegistry

- Workflow engine at alces.icm.edu.pl

- ICM-HALO

- Global storage at alces.icm.edu.pl

- Navigator
- Keystore
- Truststore
- Output for Job Zada...



of 3

PLOTS Stdout Stderr Log

- *Zadanie_R
- Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Clie

Arguments to script

Upload files

Browse

Remove

R Files Variables Resources



UNICORE

Grid Browser



Grid

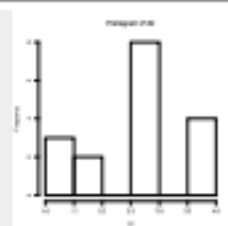
PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Navigator Keystore Truststore Output for Job Zada...



|<< << 2 of 3 >> >>| Save

PLOTS Stdout Stderr Log

*Zadanie_R Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Clie

Arguments to script

Upload files

Browse

Remove

R Files Variables Resources



UNICORE

Grid Browser

Grid

PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Zakładki pozwalają na otwarcie kolejnych plików wynikowych (wykresy, standardowe wyjście, błędy, szczegółowe informacje o przebiegu zadania).

Output for Job Zada...

Navigation controls: back, forward, page 2 of 3, and Save button.

PLOTS Stdout Stderr Log

*Zadanie_R

Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Client

Arguments to script

Upload files

Browse

Remove

R Files Variables Resources



UNICORE

Grid Browser



Grid

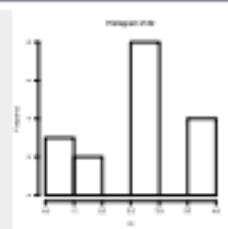
PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Navigator Keystore Truststore Output for Job Zada...



|<< << 2 of 3 >> >>| Save

PLOTS Stdout Stderr Log

*Zadanie_R Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Client

Arguments to script

Upload files

Browse

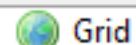
Remove

R Files Variables Resources



UNICORE

Grid Browser



Grid

PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Navigator Keystore Truststore Output for Job Zada...

Warning: no access to tty (Bad file descriptor).

Thus no job control in this shell.

WARNING: ignoring environment value of R_HOME

[1] 3 7 7 6 5 4 5 8 5 5 7 7 6 6 3 6 5

Min. 1st Qu. Median Mean 3rd Qu. Max.

3.000 5.000 6.000 5.588 7.000 8.000

PLOTS

Stdout

Stderr

Log

*Zadanie_R

Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
```

```
hist(d1)
```

```
hist(d2)
```

```
d <- d1 + d2
```

```
hist(d)
```

```
d
```

```
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Clie

Arguments to script

Upload files

Browse

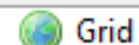
Remove

R

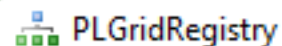
Files

Variables

Resources



Grid



PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

```
Warning: no access to tty (Bad file descriptor).
Thus no job control in this shell.
WARNING: ignoring environment value of R_HOME
[1] 3 7 7 6 5 4 5 8 5 5 7 7 6 6 3 6 5
  Min. 1st Qu.  Median   Mean 3rd Qu.  Max.
 3.000  5.000  6.000  5.588  7.000  8.000
```

PLOTS Stdout Stderr Log

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Clie

Arguments to script

Upload files

Browse

Remove

R Files Variables Resources



UNICORE

Grid Browser



Grid

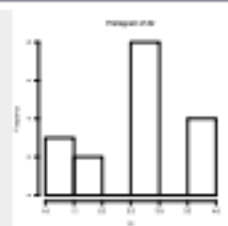
PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Navigator Keystore Truststore Output for Job Zada...



|<< << 2 of 3 >> >>| Save

PLOTS Stdout Stderr Log

*Zadanie_R

Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

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hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Clie

Arguments to script

Upload files

Browse

Remove

R Files Variables Resources



UNICORE

Grid Browser



Grid

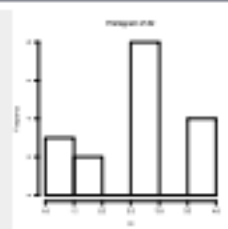
PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Navigator Keystore Truststore Output for Job Zada...



|<< << 2 of 3 >> >>| Save

PLOTS Stdout Stderr Log

*Zadanie_R

Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

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hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Clie

Arguments to script

Upload files

Browse

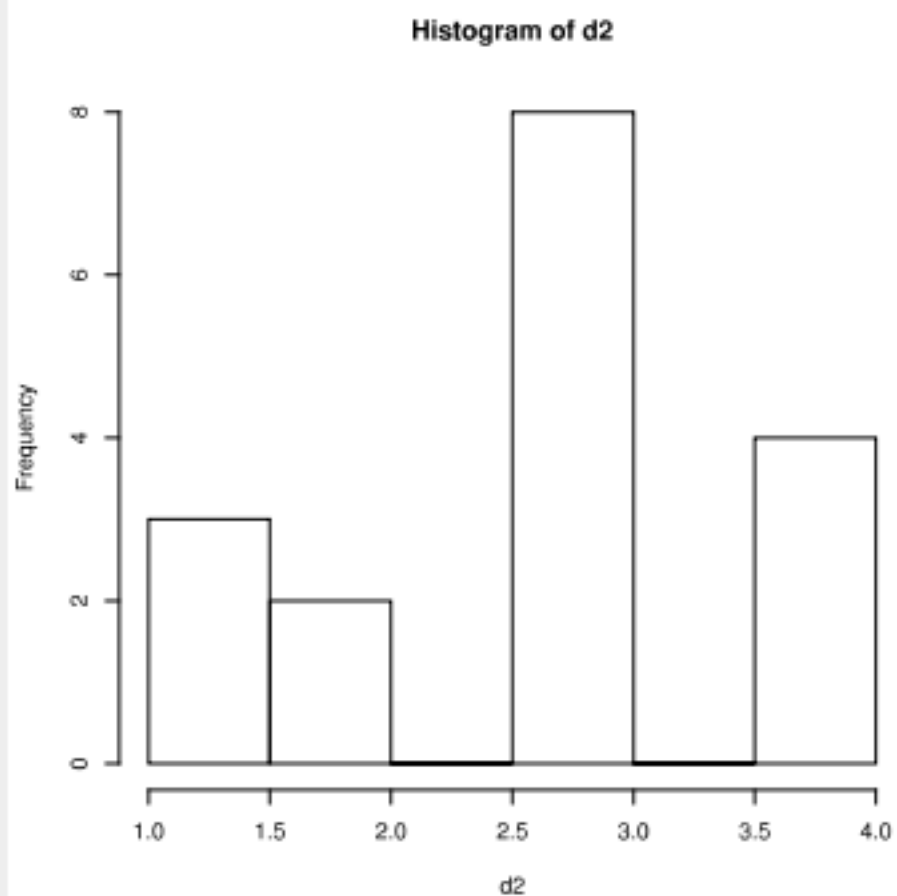
Remove

R Files Variables Resources



UNICORE

Navigator Keystore Truststore Output for Job Zadanie_R submitted at 2010-09-21 12-24-14



<<

<<

2

of 3

>>

>>

Save

PLOTS

Stdout

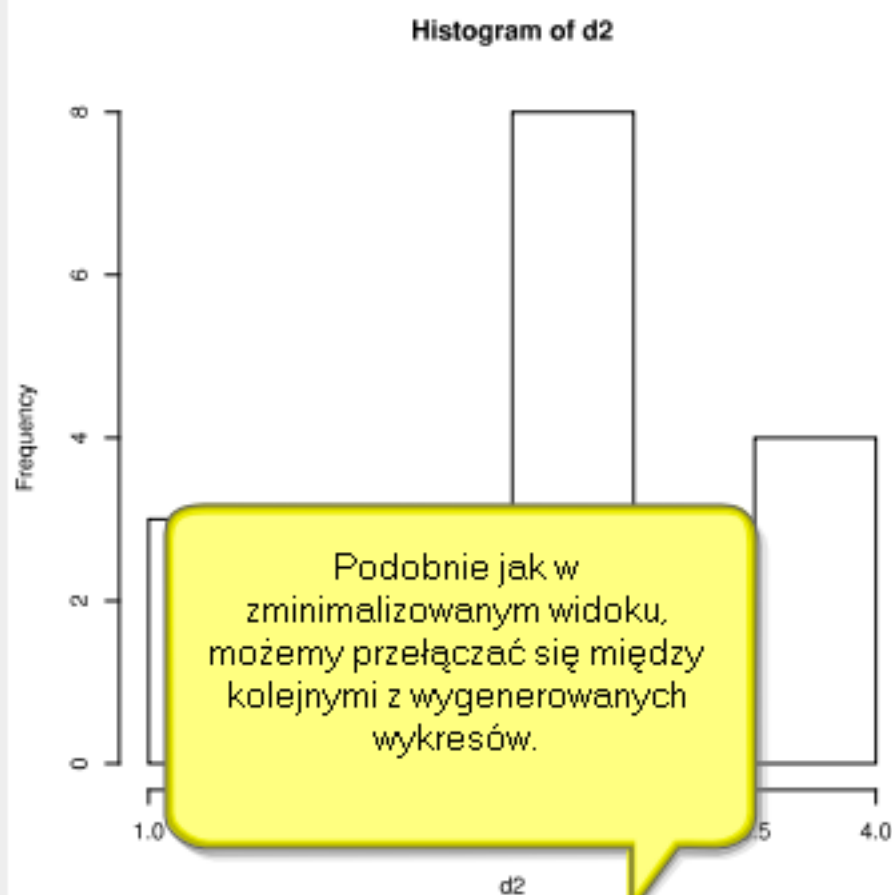
Stderr

Log



UNICORE

Navigator Keystore Truststore Output for Job Zadanie_R submitted at 2010-09-21 12-24-14



Wyświetlić możemy pozostałe pliki wynikowe.

Podobnie jak w zminimalizowanym widoku, możemy przełączać się między kolejnymi z wygenerowanych wykresów.

Przycisk: Save pozwala na zapis pojedynczego, aktualnie wyświetlanego, wykresu na lokalnej maszynie.

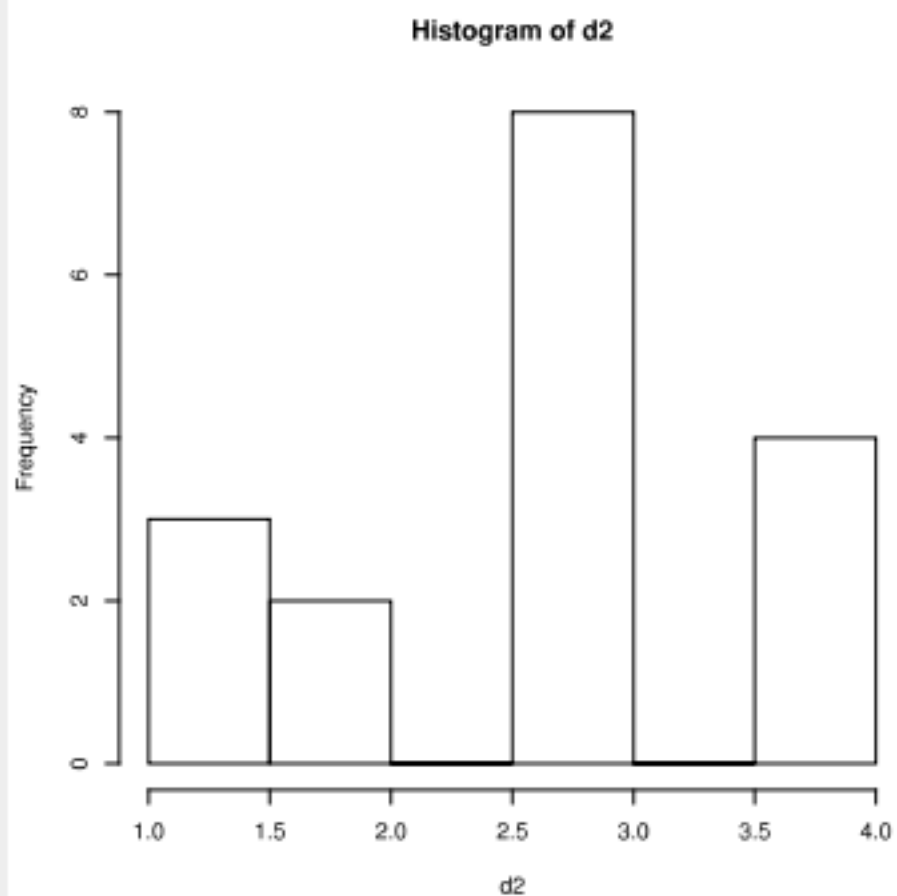
|<< << 2 of 3 >> >>| Save

PLOTS Stdout Stderr Log



UNICORE

Navigator Keystore Truststore Output for Job Zadanie_R submitted at 2010-09-21 12-24-14



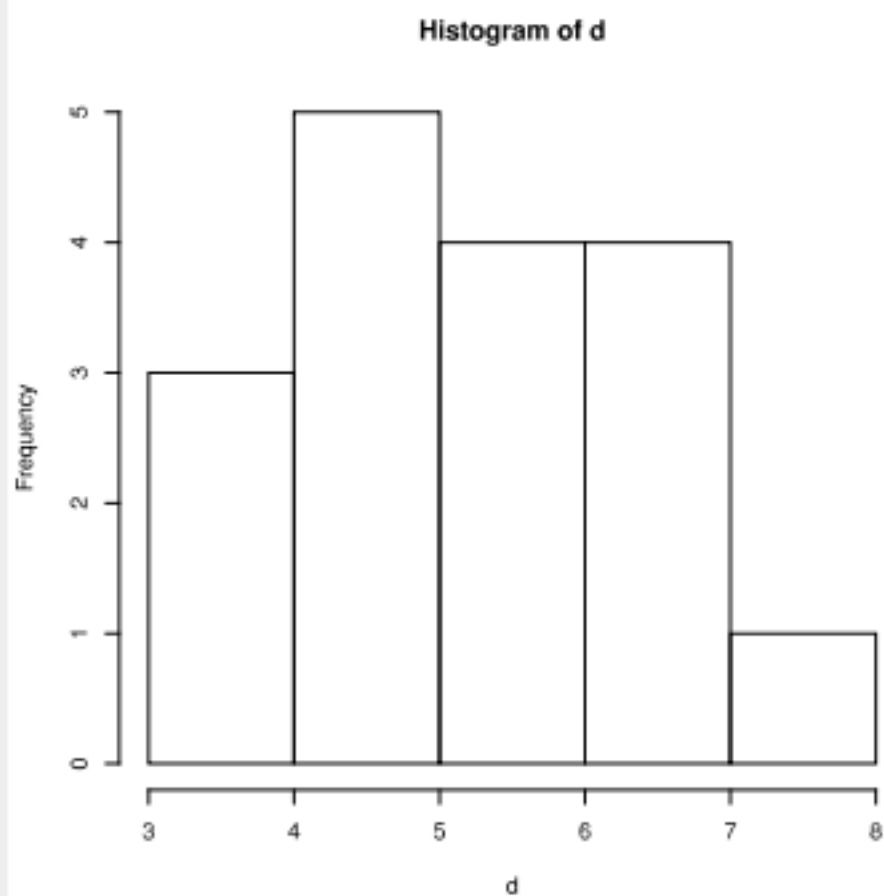
|<< << 2 of 3 >>| Save

PLOTS Stdout Stderr Log



UNICORE

Navigator Keystore Truststore Output for Job Zadanie_R submitted at 2010-09-21 12-24-14



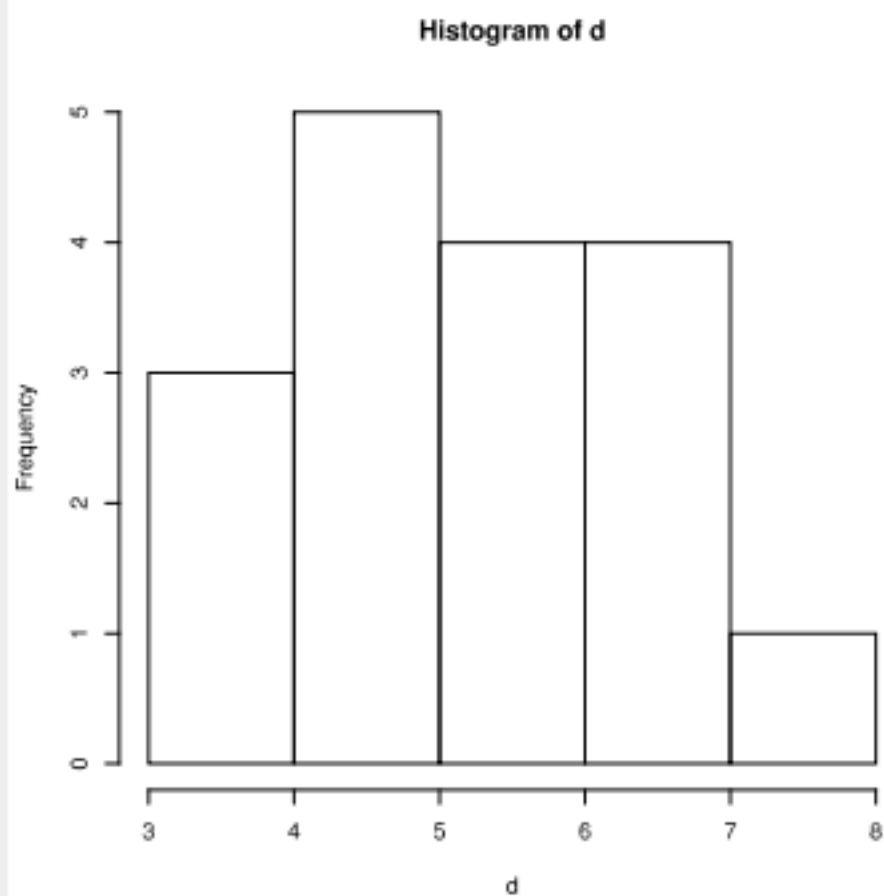
|<< << 3 of 3 >>| Save

PLOTS Stdout Stderr Log



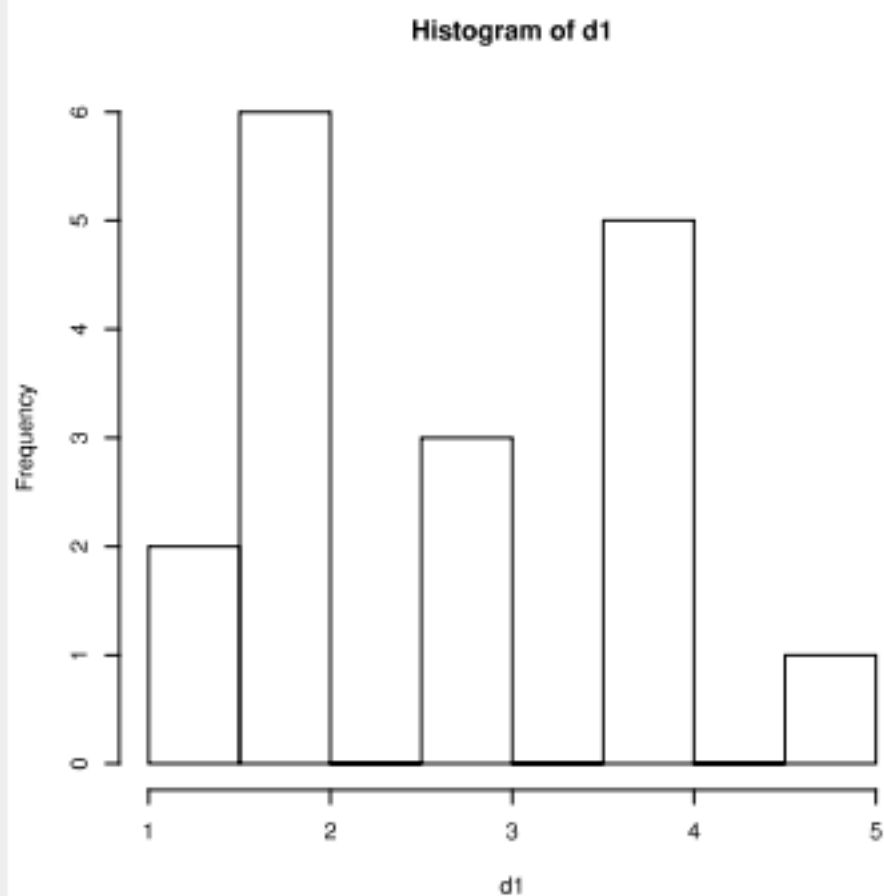
UNICORE

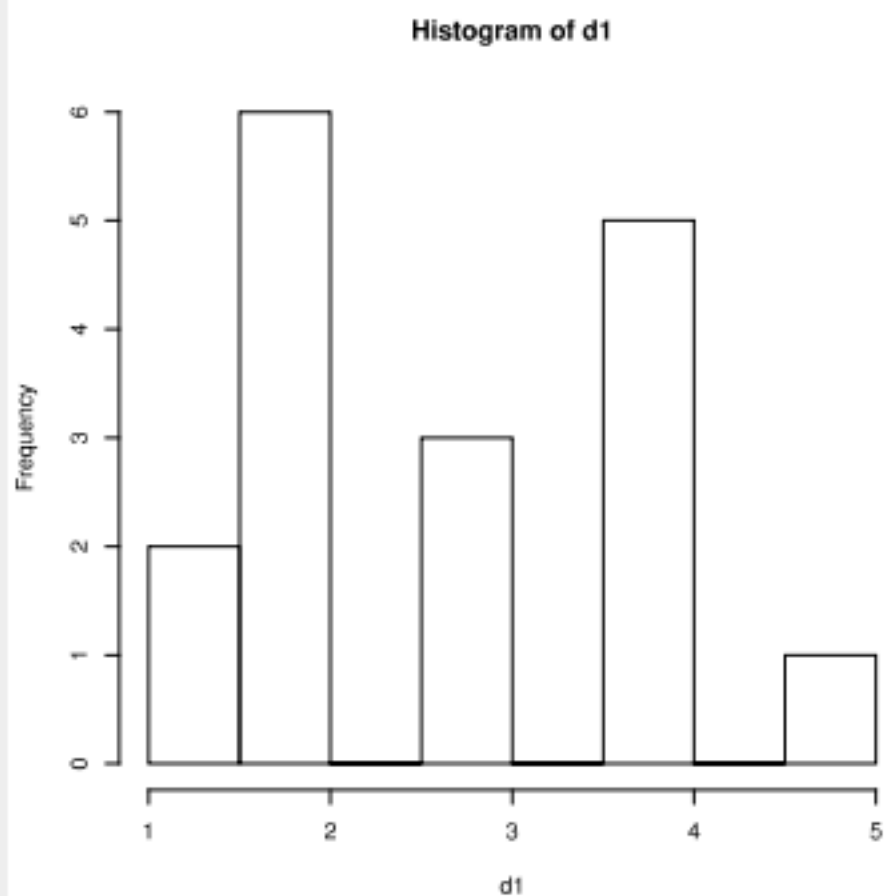
Navigator Keystore Truststore Output for Job Zadanie_R submitted at 2010-09-21 12-24-14



|<< 3 of 3 >> >>| Save

PLOTS Stdout Stderr Log





<<

<<

1

of 3

>>

>>

Save

PLOTS

Stdout

Stderr

Log



UNICORE

Grid Browser



show

Grid

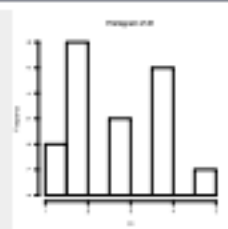
PLGridRegistry

Workflow engine at alces.icm.edu.pl

ICM-HALO

Global storage at alces.icm.edu.pl

Navigator Keystore Truststore Output for Job Zada...



<<

<<

1

of 3

>>

>>

Save

PLOTS

Stdout

Stderr

Log

*Zadanie_R

Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Clie

Arguments to script

Upload files

Browse

Remove

R

Files

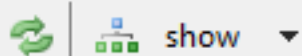
Variables

Resources



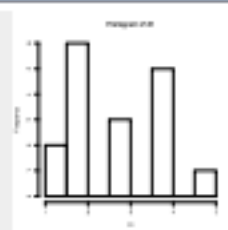
UNICORE

Grid Browser



- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - Global storage at alces.icm.edu.pl

Navigator Keystore Truststore Output for Job Zada...



|<< << 1 of 3 >> >>| Save

PLOTS Stdout Stderr Log

*Zadanie_R Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
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hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Client-6.3.0

Arguments to script

Upload files

Browse

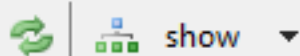
Remove

R Files Variables Resources



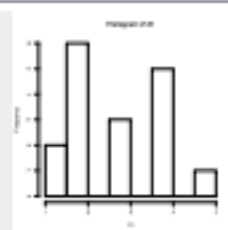
UNICORE

Grid Browser



- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - M-HALO_TargetSystem
 - Global storage at alces.icm.edu.pl

Navigator Keystore Truststore Output for Job Zada...



|<< << 1 of 3 >> >>| Save

PLOTS Stdout Stderr Log

refreshing: (37%)



*Zadanie_R Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Client

Arguments to script

Upload files

Browse

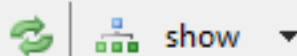
Remove

R Files Variables Resources



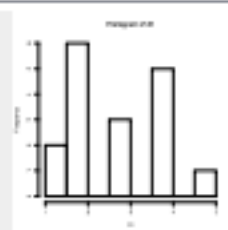
UNICORE

Grid Browser



- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - ICM-HALO_TargetSystem
 - ICM-HALO_TargetSystem Home
 - Jobs
 - Global storage at alces.icm.edu.pl

Navigator Keystore Truststore Output for Job Zada...



|<< << 1 of 3 >> >>| Save

PLOTS Stdout Stderr Log

*Zadanie_R Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

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d2 <- dane$Dat2
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d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Client-6.3.0

Arguments to script

Upload files

Browse

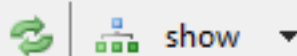
Remove

R Files Variables Resources



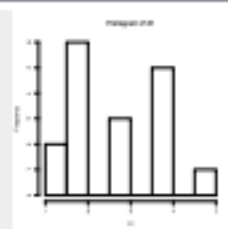
UNICORE

Grid Browser



- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - ICM-HALO_TargetSystem
 - ICM-HALO_TargetSystem Home
 - Jobs
 - Global storage at alces.icm.edu.pl

Navigator Keystore Truststore Output for Job Zada...



|<< << 1 of 3 >> >>| Save

PLOTS Stdout Stderr Log

*Zadanie_R Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

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d2 <- dane$Dat2
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d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Client-6.3.0

Arguments to script

Upload files

Browse

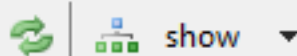
Remove

R Files Variables Resources



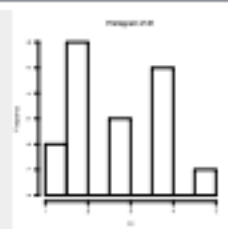
UNICORE

Grid Browser



- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - ICM-HALO_TargetSystem
 - ICM-HALO_TargetSystem Home
 - Jobs
 - Zadanie_R submitted at 2010-09-21 12-24-14
 - ZadanieSkrypt submitted at 2010-09-20 14-17-50
 - Global storage at alces.icm.edu.pl

Navigator Keystore Truststore Output for Job Zada...



|<< << 1 of 3 >> >>| Save

PLOTS Stdout Stderr Log

refreshing: (0%)



*Zadanie_R Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Clie

Arguments to script

Upload files

Browse

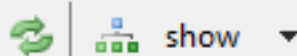
Remove

R Files Variables Resources



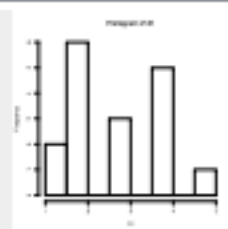
UNICORE

Grid Browser



- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - ICM-HALO_TargetSystem
 - ICM-HALO_TargetSystem Home
 - Jobs
 - Zadanie_R submitted at 2010-09-21 12-24-14
 - ZadanieSkrypt submitted at 2010-09-20 14-17-50
 - Global storage at alces.icm.edu.pl

Navigator Keystore Truststore Output for Job Zada...



|<< << 1 of 3 >> >>| Save

PLOTS Stdout Stderr Log

*Zadanie_R Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
hist(d1)
hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Client

Arguments to script

Upload files

Browse

Remove

R Files Variables Resources



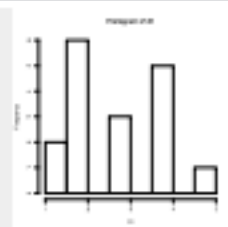
UNICORE

Grid Browser

show

- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - ICM-HALO_TargetSystem
 - ICM-HALO_TargetSystem Home
 - Jobs
 - Zadanie_R submitted at 2010-09-21 12-24-14
 - Working directory of Zadanie_R submitted at 2010-
 - skrypt.r
 - data.txt

Navigator Keystore Truststore Output for Job Zada...



<<< << 1 of 3 >> >>> Save

PLOTS Stdout Stderr Log

refreshing: (37%)



*Zadanie_R Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

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d2 <- dane$Dat2
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d
summary(d)
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File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Client-6.3.0

Arguments to script

Upload files

Browse

Remove

R Files Variables Resources



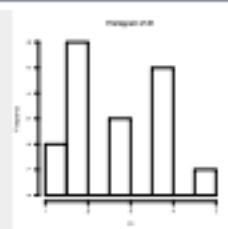
UNICORE

Grid Browser



- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - ICM-HALO_TargetSystem
 - ICM-HALO_TargetSystem Home
 - Jobs
 - Zadanie_R submitted at 2010-09-21 12-24-14
 - Working directory of Zadanie_R submitted at 2010-
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 - data.txt

Navigator Keystore Truststore Output for Job Zada...



|<< << 1 of 3 >> >>| Save

PLOTS Stdout Stderr Log

*Zadanie_R Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

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d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Clie

Arguments to script

Upload files

Browse

Remove

R Files Variables Resources



UNICORE

Grid Browser



- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - ICM-HALO_TargetSystem
 - ICM-HALO_TargetSystem Home
 - Jobs
 - Zadanie_R submitted at 2010-09-21 12-24-14
 - Working directory of Zadanie_R submitted at 2010-09-21 12-24-14
 - skrypt.r
 - data.txt
 - TSI_temp_file_14180
 - tsi_submit_22018
 - Rplots.pdf
 - UNICORE_SCRIPT_EXIT_CODE
 - stdout
 - stderr

Navigator Keystore Truststore Output for Job Zada...

PLOTS Stdout Stderr Log

*Zadanie_R Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

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d2 <- dane$Dat2
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d
summary(d)
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File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Client

Arguments to script

Upload files

Browse

Remove

R Files Variables Resources



UNICORE

Grid Browser



- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - ICM-HALO_TargetSystem
 - ICM-HALO_TargetSystem Home
 - Jobs
 - Zadanie_R submitted at 2010-09-21 12-24-14
 - Working directory of Zadanie_R submitted at 2010-09-21 12-24-14
 - skrypt.r
 - data.txt
 - TS\temp_file_14180
 - tsi_submit_22018
 - Rplots.pdf
 - UNICORE_SCRIPT_EXIT_CODE
 - stdout
 - stderr

Navigator Keystore Truststore Output for Job Zada...

PLOTS Stdout Stderr Log

*Zadanie_R Zadanie_R submitted at 2010-09-21 12-24-14 (finished)

JobName: Zadanie_R submitted at 2010-09-21 12-24-14

File Edit

```
d2 <- dane$Dat2
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hist(d2)
d <- d1 + d2
hist(d)
d
summary(d)
```

File: C:\Users\PL_GRID\Desktop\UNICORE-Client-6.3.0\UNICORE-Client

Arguments to script

Upload files

Browse

Remove

R Files Variables Resources

The screenshot shows the UNICORE Rich Client interface. On the left, the 'Grid Browser' pane displays a tree view under 'Grid' > 'PLGridRegistry' > 'Workflow engine at' > 'ICM-HALO' > 'ICM-HALO_Target' > 'Jobs' > 'Zadanie_R' > 'Working directory'. A file named 'tsi_submit_22018' is selected. A context menu is open over this file, listing actions such as 'add Registry', 'change permissions', 'copy', 'cut', 'delete', 'details', 'download', 'map to security profile', 'open in editor', 'paste', 'refresh', 'rename', and 'save as'. The 'open in editor' option is highlighted, and a yellow callout bubble points to it.

- add Registry
- change permissions
- copy Ctrl+C
- cut Ctrl+X
- delete
- details
- download
- map to security profile
- open in editor
- paste
- refresh
- rename
- save as

Otwórzmy, przesłany
uprzednio na zdalną
maszynę, plik z danym.

Navigator Keystore Truststore Output for Job Zada...

PLOTS Stdout Stderr Log

The screenshot shows the 'Job Details' view for 'Zadanie_R'. The 'JobName' field contains 'Zadanie_R submitted at 2010-09-21 12-24-14 (finished)'. Below this is a code editor with the following R script:

```
dat2 <- dane$Dat2
list(d1)
list(d2)
<- d1 + d2
list(d)
```

The 'Arguments to script' field is empty. The 'Upload files' section contains a 'Browse' button and a 'Remove' button. The bottom navigation bar shows 'R', 'Files', 'Variables', and 'Resources'.



UNICORE

Grid Browser

- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - ICM-HALO_TargetSystem
 - ICM-HALO_TargetSystemHome
 - Jobs
 - Zadanie_R submitted at 2010-09-21 12-24-14
 - Working directory of Zadanie_R submitted at 2010-
 - skrypt.r
 - data.txt
 - TSI_temp_file_14180
 - tsi_submit_22018
 - Rplots.pdf
 - UNICORE_SCRIPT_EXIT_CODE
 - stdout
 - stderr

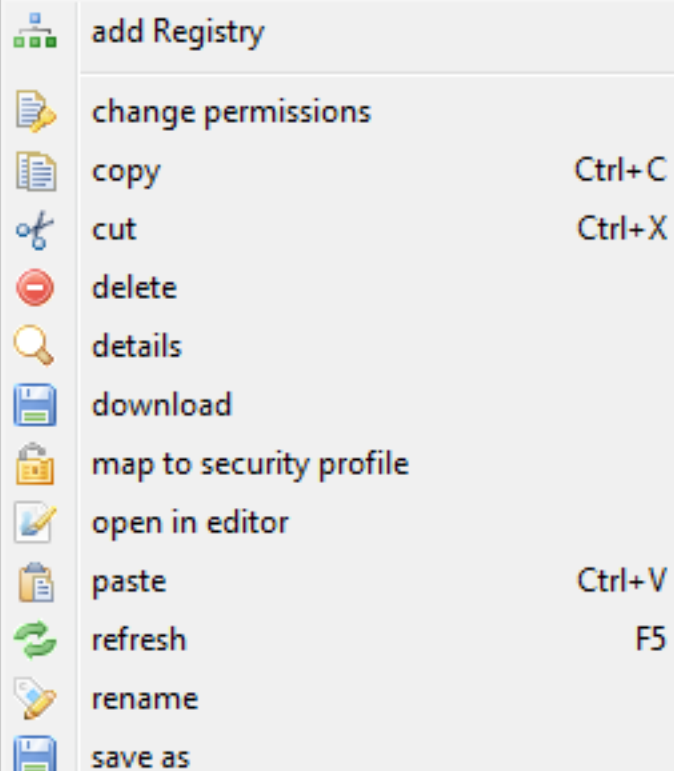
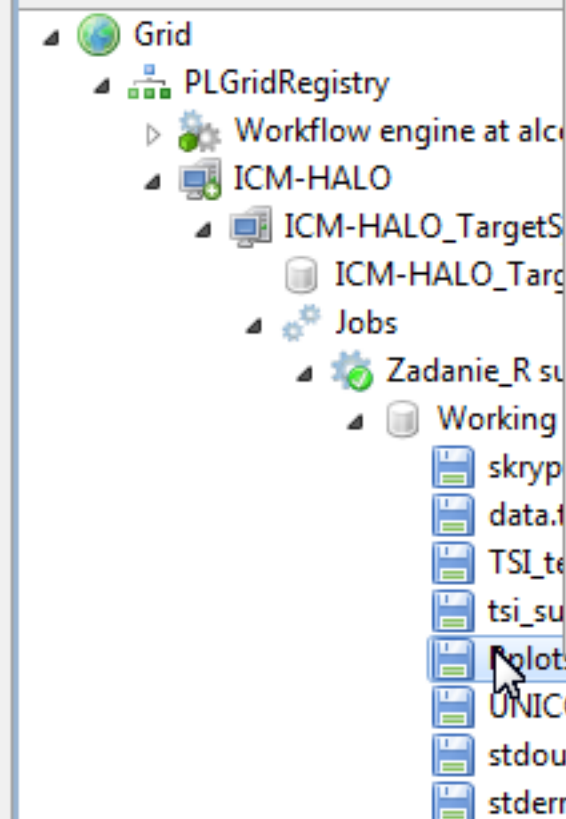
Navigator Keystore Truststore Output for Job Zada...

PLOTS Stdout Stderr Log

*Zadanie_R Zadanie_R submitted at 2010-09-21 12... data.txt

Dat1 Dat2 Dat3

```
1 2 3
4 3 3
4 3 5
5 1 4
2 3 6
3 1 3
2 3 1
4 4 2
2 3 8
2 3 4
4 3 2
3 4 4
2 4 5
4 2 6
2 1 3
3 3 4
1 4 4
```

dat1	Dat2	Dat3
2	3	
3	3	
3	5	
1	4	
3	6	
1	3	
3	1	
4	2	
3	8	
3	4	
3	2	
4	4	
4	5	
2	6	
1	3	
3	3	4
1	4	4

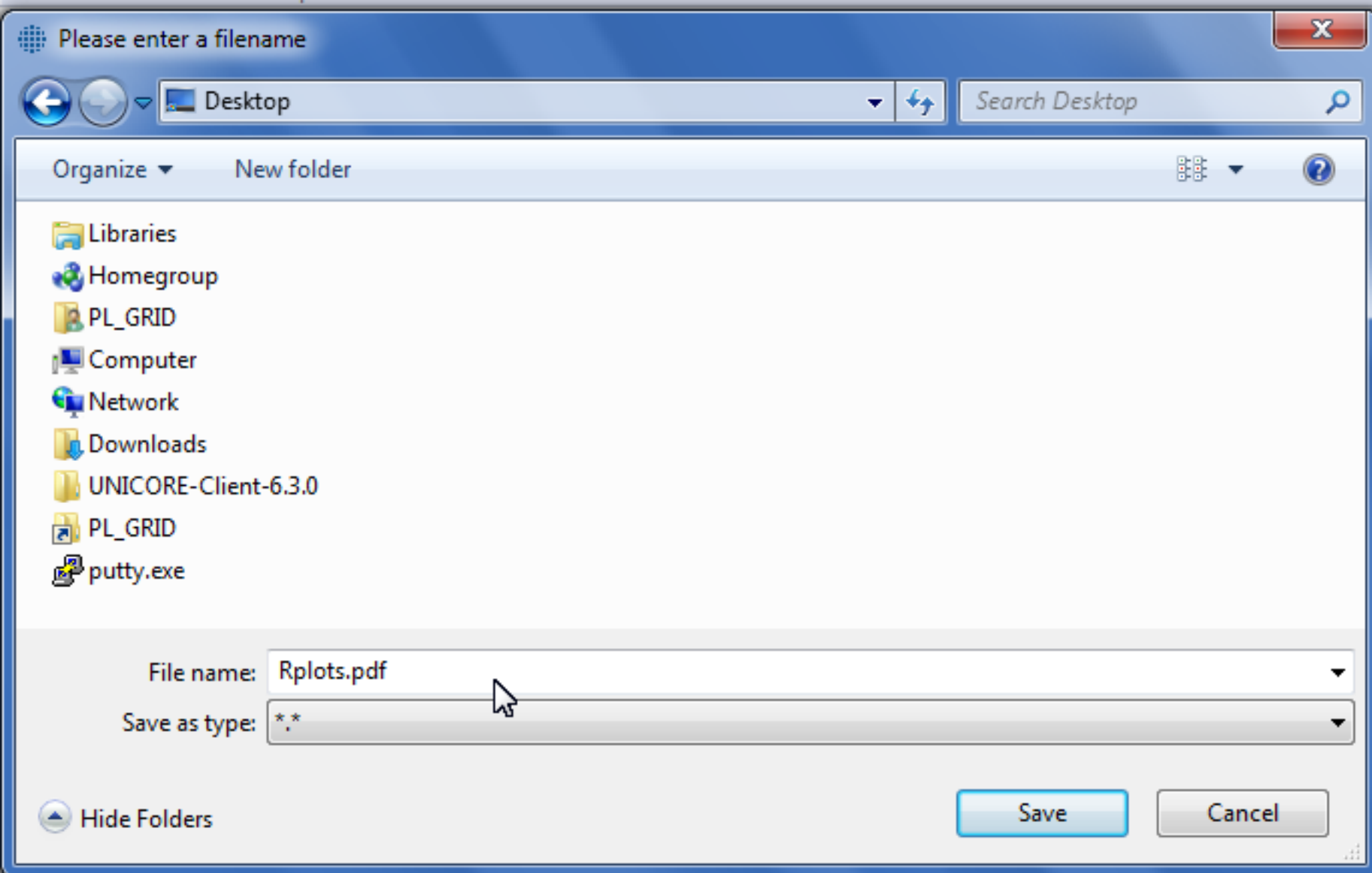


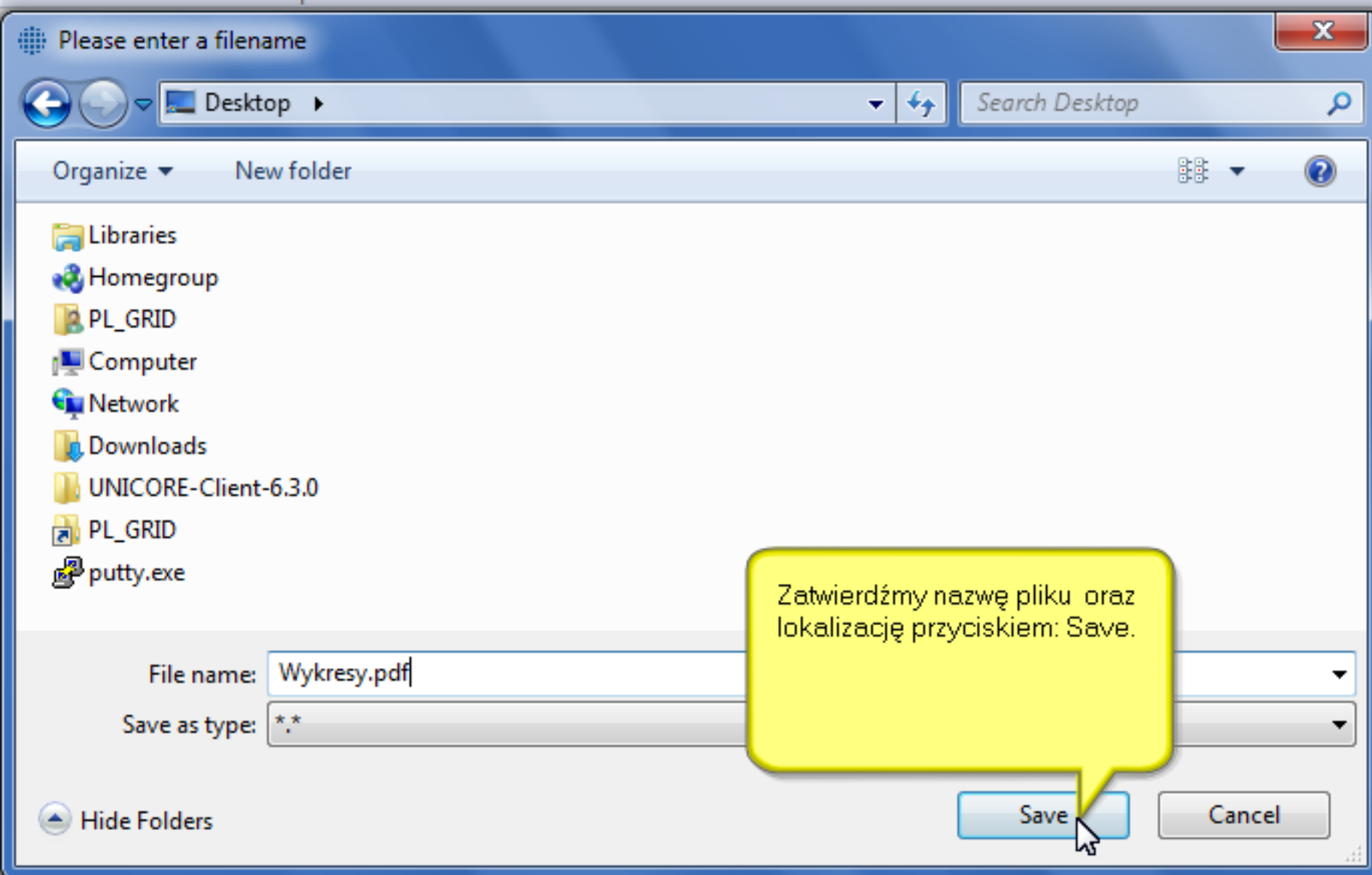
- Grid
 - PLGridRegistry
 - Workflow engine at alca...
 - ICM-HALO
 - ICM-HALO_TargetS
 - ICM-HALO_Targ...
 - Jobs
 - Zadanie_R su...
 - Working
 - skryp...
 - data.t...
 - TSL_t...
 - tsi_su...
 - Rplots.pur...
 - UNICORE_SCRIPT_EXIT_CODE
 - stdout
 - stderr

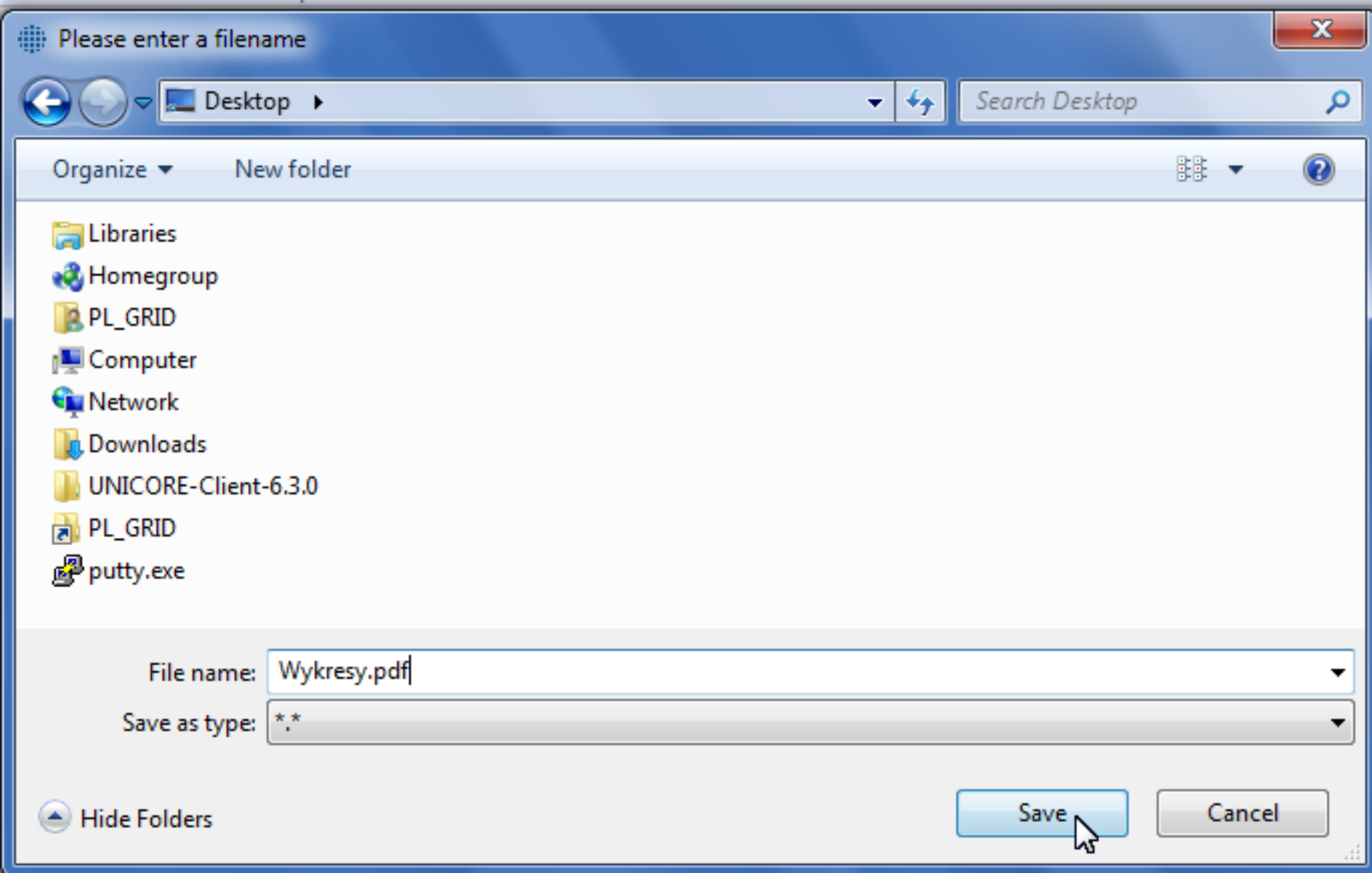
- add Registry
- change permissions
- copy Ctrl+C
- cut Ctrl+X
- delete
- details
- download
- map to security profile
- open in editor
- paste Ctrl+V
- refresh F5
- rename
- save as

Dat1	Dat2	Dat3
2	3	
3	3	
3	5	
1	4	
3	6	
1	3	
3	1	
4	2	
3	8	
3	4	
3	2	
4	4	

Zapiszmy plik z wygenerowanymi wykresami na pulpicie naszego komputera.









- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - ICM-HALO_TargetSystem
 - ICM-HALO_TargetSystem Home
 - Jobs
 - Zadanie_R submitted at 2010-09-21 12-24-14
 - Working directory of Zadanie_R submitted at 2010-09-21 12-24-14
 - skrypt.r
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 - tsi_submit_22018
 - Rplots.pdf
 - UNICORE_SCRIPT_EXIT_CODE
 - stdout
 - stderr

Dat1	Dat2	Dat3
------	------	------

1	2	3
4	3	3
4	3	5
5	1	4
2	3	6
3	1	3
2	3	1
4	4	2
2	3	8
2	3	4
4	3	2
3	4	4
2	4	5
4	2	6
2	1	3
3	3	4
1	4	4





- Grid
 - PLGridRegistry
 - Workflow engine at alces.icm.edu.pl
 - ICM-HALO
 - ICM-HALO_TargetSystem
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Dat1	Dat2	Dat3
------	------	------

1	2	3
4	3	3
4	3	5
5	1	4
2	3	6
3	1	3
2	3	1
4	4	2
2	3	8
2	3	4
4	3	2
3	4	4
2	4	5
4	2	6
2	1	3
3	3	4
1	4	4



Recycle Bin



PL_GRID



Downloads



putty.exe



UNICORE-Cl...

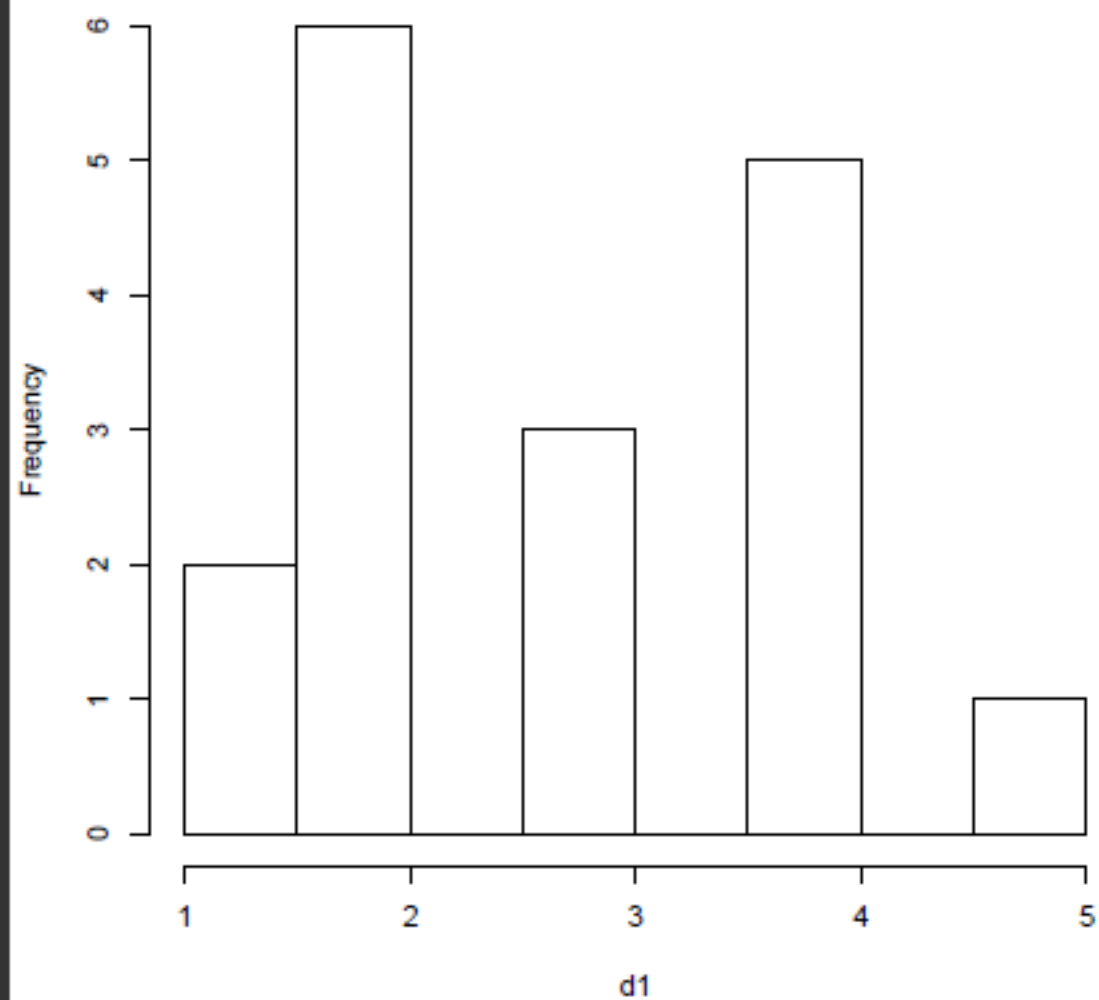


Wykresy.pdf

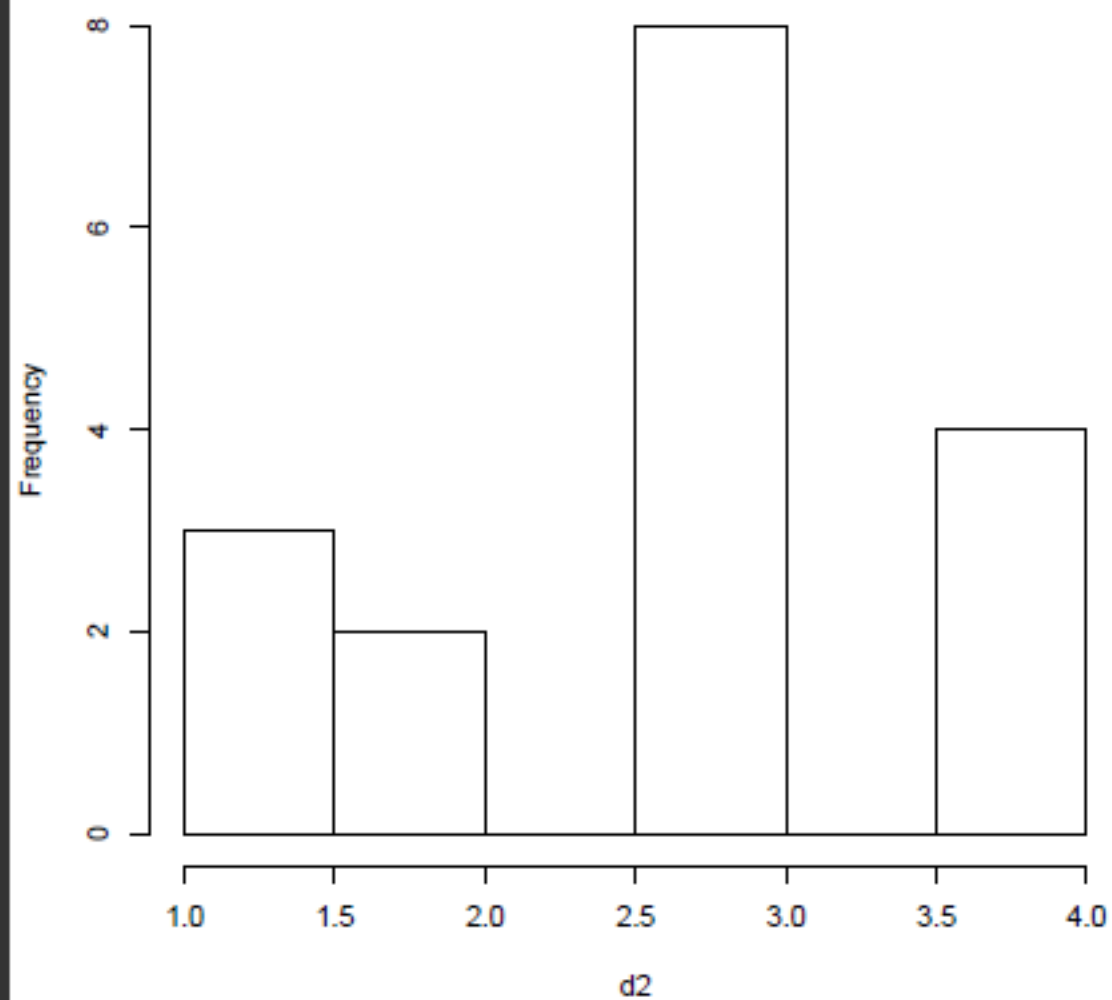
Możemy otworzyć
zapisany na pulpicie
plik.



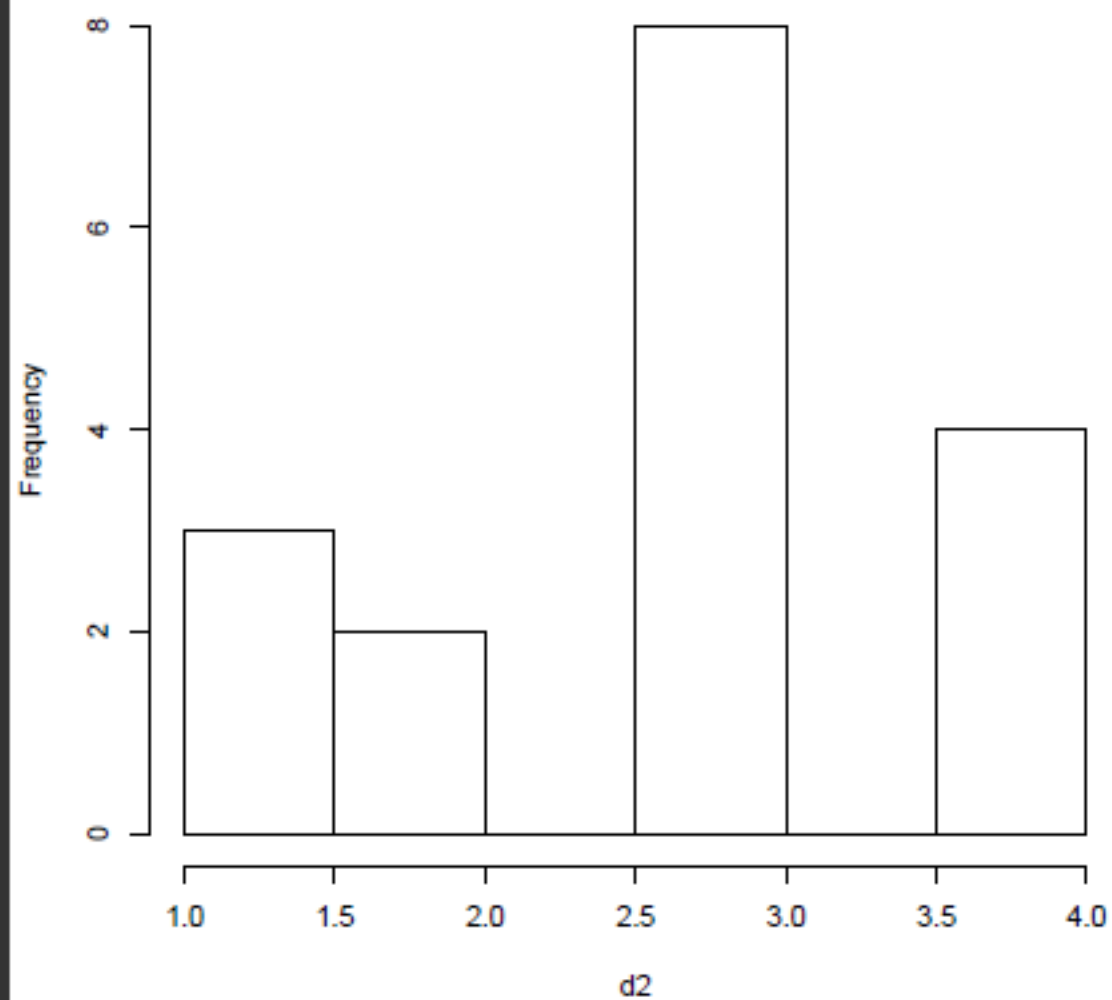
Histogram of d1



Histogram of d2



Histogram of d2





PL_GRID



Downloads



putty.exe



UNICORE-CI...



Wykresy.pdf



Recycle Bin