

Messungen und Vergleich von Virtualisierungsumgebungen

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Aufrufe

▶ Host

- ▶ `python host.py 50007 2 5`

- ▶ Parameter 1: Port für VMs für Verbindung
- ▶ Parameter 2: Anzahl der VMs
- ▶ Parameter 3: Anzahl der Iterationen (=Testlänge)

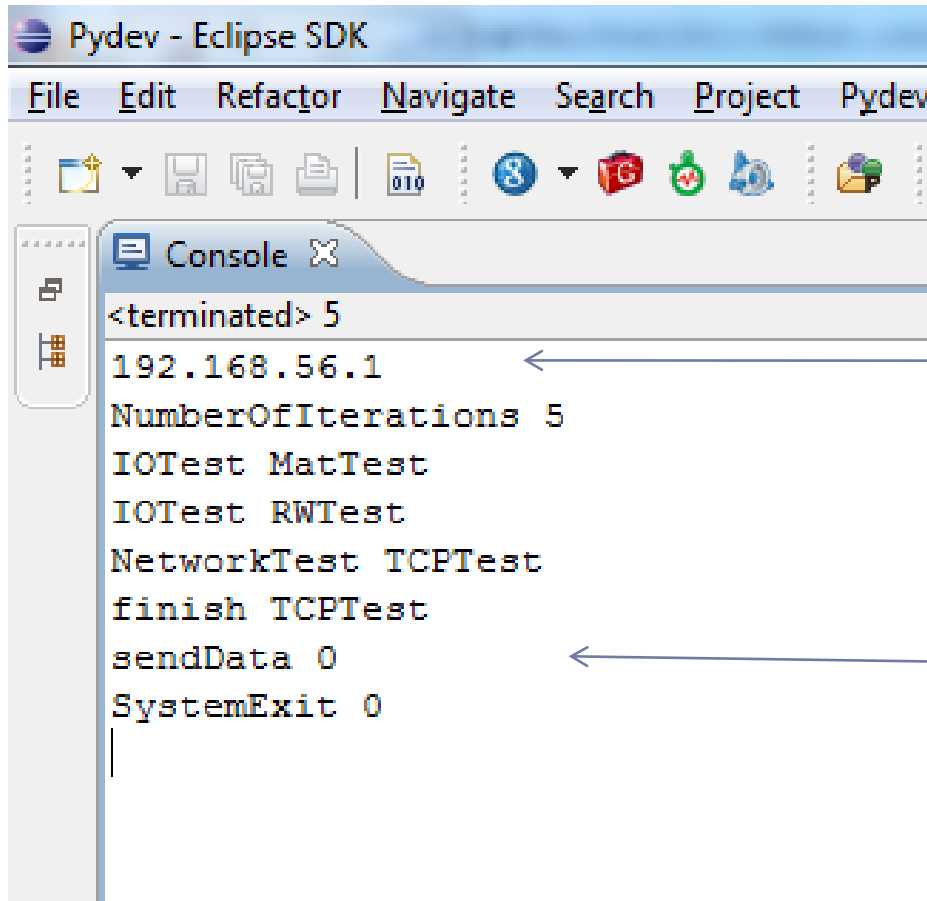
▶ Client

- ▶ `python client.py 50007 192.168.56.1`

- ▶ Parameter 1: Port zur Verbindung mit Host
- ▶ Parameter 2: IP-Adresse des Hosts



Host Console I

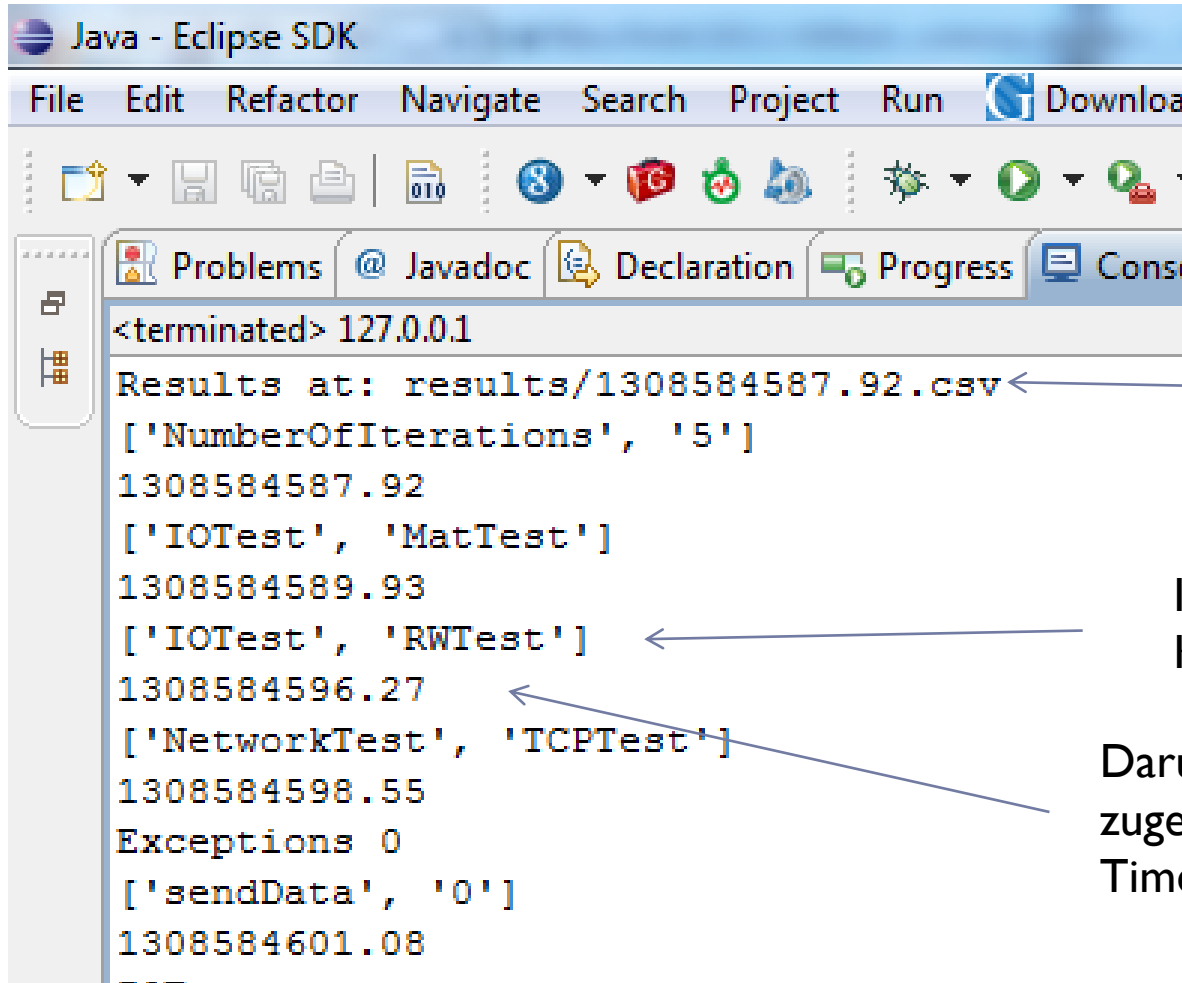


```
Pydev - Eclipse SDK
File Edit Refactor Navigate Search Project Pydev
Console x
<terminated> 5
192.168.56.1
NumberOfIterations 5
IOTest MatTest
IOTest RWTest
NetworkTest TCPTTest
finish TCPTTest
sendData 0
SystemExit 0
|
```

Ausgabe der eigenen IP-Adresse

Kommandos geschickt an VMs
Ausnahme: finish kommt von VM

Client Console I



The screenshot shows the Eclipse IDE's console window. The title bar reads 'Java - Eclipse SDK'. The menu bar includes 'File', 'Edit', 'Refactor', 'Navigate', 'Search', 'Project', 'Run', and 'Download'. The toolbar contains various icons for file operations and development tools. The console tab is active, displaying the following output:

```
<terminated> 127.0.0.1
Results at: results/1308584587.92.csv
['NumberOfIterations', '5']
1308584587.92
['IOTest', 'MatTest']
1308584589.93
['IOTest', 'RWTest']
1308584596.27
['NetworkTest', 'TCPTTest']
1308584598.55
Exceptions 0
['sendData', '0']
1308584601.08
---
```

Pfad der
zwischengespeiche
rten Resultate

In Klammern das
Kommando des Hosts

Darunter der
zugehörige
Timestamp

Client Console II

```
[ SendData , 0 ]
1308584601.08
IOTest
Matteest
Christoph-Idea
0,0.824000120163,0.824000120163
1,0.879999876022,1.70399999619
2,0.850000143051,2.55400013924
3,0.906999826431,3.46099996567
4,0.870000123978,4.33100008965
IOTest
I/O
Christoph-Idea
0,0.0750000476837,0.0750000476837
1,0.0889999866486,0.164000034332
2,0.0349998474121,0.198999881744
3,0.0370001792908,0.236000061035
4,0.0460000038147,0.28200006485
NetworkTest
TCP
Christoph-Idea
0,0.00300002098083,0.00300002098083
1,0.00399994850159,0.00699996948242
2,0.00400018692017,0.0110001564026
3,0.00399994850159,0.0150001049042
4,0.507999897003,0.523000001907

sendall 582
['SystemExit', '0']
1308584613.09
```

Übermittlung des csv-Files von VM zum Host
Das csv-File beinhaltet:

- Test Typ
- Test Subtyp
- Client Name
- Data

Anzahl der
übermittelten Bytes

Beendigung des Scripts
initiiert durch den Host

Tests

- ▶ **Mattest:**

- ▶ Mehrmalige rekursive Berechnung der Fibonacci-Zahlen, bis zur 15. Ordnung

- ▶ **RWTest**

- ▶ Mehrmaliges auslesen und speichern des „Lorem ipsum“-Textes

- ▶ **TCPTTest**

- ▶ Mehrmalige Verbindungsversuche via TCP zum Host

- ▶ **BandwidthTest**

- ▶ Verbindung zum Host und Übermittlung von Daten → Berechnung der Bandbreite

