CSCI251/CSCI851 Autumn-2020 Advanced Programming (LT1)

Lecture Tutorial 1

Outline

- Connecting to capa ... more added.
- Variable basics.
 - Naming.
 - **—** . . .
- Types for use ...

Connecting to capa

- Likely to be confirmed soon as the required compilation environment.
- capa.its.uow.edu.au
 - Linux server running Ubuntu 18.04 LTS
- Connect using SSH.
- You can develop in another environment but make sure your program works on capa.

Windows : Download the Bitvise installer from on Moodle and install in.

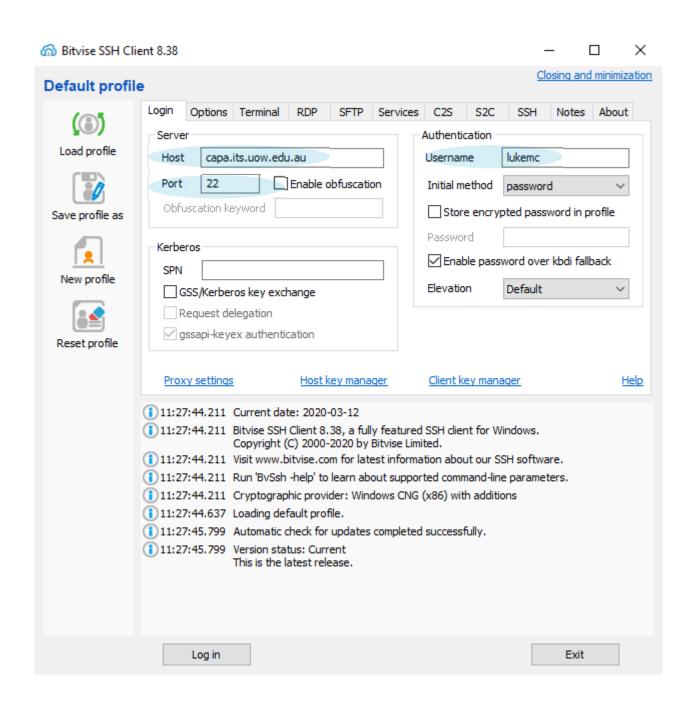
MacOS: There is supposed to be a MacOS Bitvise too.

There are various other programs that facilitate similar SSH server connection, but Bitvise is the one in the lab.



Port

Username
Use your
own one...



Host Key Verification

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- When you then use login...
- ... make sure the fingerprints match ...

New host key

Either the connection to this host is being established for the first time or the host key has been removed from, or never saved to the database.

Please contact the server's administrator and verify the received key. Accepting the host key without verification is **not recommended**.

Connecting to capa.its.uow.edu.au: 22

Host key algorithm: RSA, size: 2048 bits.

MD5 Fingerprint:

69:bb:1a:08:c2:b1:eb:88:e2:5a:80:f2:4d:7a:99:40

Bubble-Babble:

xotaq-tydiq-riluv-feteb-qolip-tybep-nybed-maven-cidun-rycor-fuxox

SHA-256 Fingerprint:

zKcE0aF/MzbNFkf1b6RYUb7GGHUdXC+lOrpYmN5f3C8

Accept and Save

Accept for This Session

Cancel

Variable basics.

- Variables are used to store data, that is representations of information/knowledge.
- Data vs information...
- For example, we want to keep track of the temperature.

Naming variables...

- Names give meaning.
- Sensible length.

Magic numbers ...

 Using a constant with a name gives information.

```
while ( temp < 100)
```

while (temp < waterBoilingPoint)

A problem? Is temp a good name?

Types for use and meaning ...

- Numbers ... integers, double, float: Different levels of precision.
 - Precision and range …