vscode-q as a Cloud IDE

for quants and developers

Jo SHINONOME

About me: Jo SHINONOME

- was a banker, had to practise counting cash
- was a SAP solution engineer
  - first programming language SAP ABAP
  - first in-memory database SAP HANA
- was a Robotic Process Automation consultant
  - replace human resource with robotic software
- a kdb+/q developer since 2016

Editors for q coding

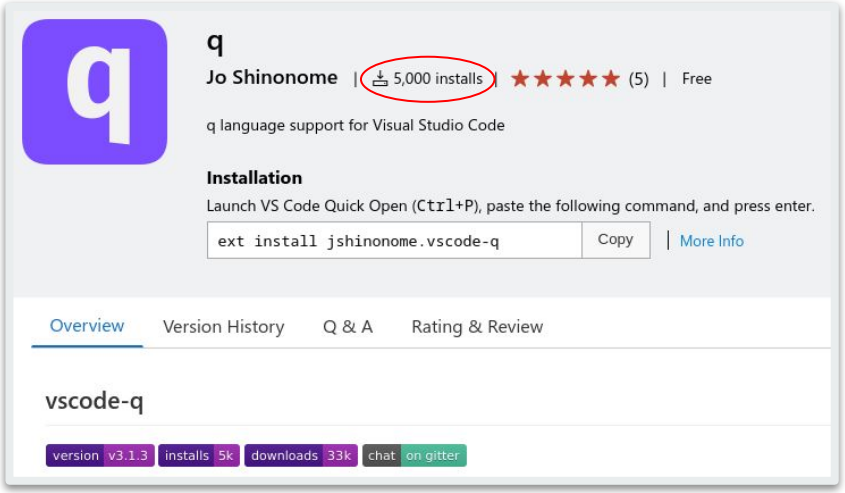
vi

atom

vscode

Users

- Citadel
- Citi
- Credit Suisse
- Jefferies
- Marshall Wace
- Morgan Stanley
- SMBC Nikko
- Squarepoint <- started creating vscode-q, since 2020.06.08, 137 version
- etc…

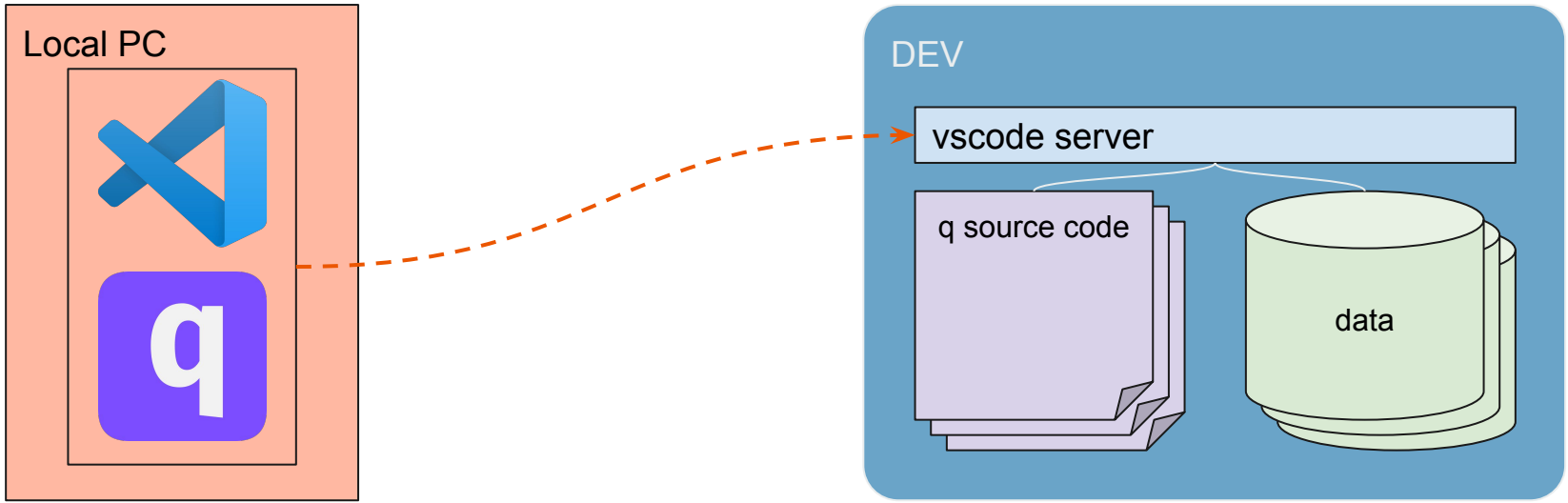


the “best” IDE for q coding

- rename symbol (F2)
- go to definition (F12)
- go to reference (Shift+F12)
- workspace symbol (Ctrl+T)
- document symbol (Ctrl+Shift+O)
- completion
  - identifiers defined in code
  - identifiers defined on kdb+ process
- column names define on kdb+ process
- signature help for local defined function
- semantic highlight
- call hierarchy

Remote SSH - Developer

code on a remote compute engine

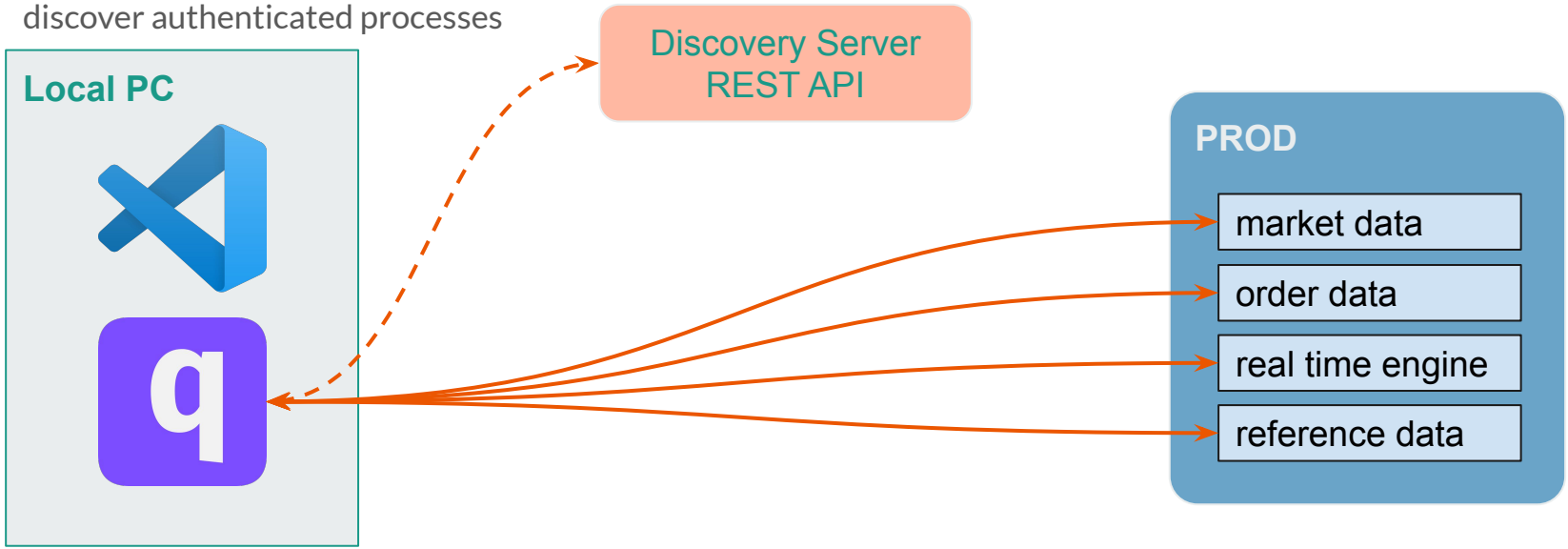


Demo - Remote SSH

- setup ssh-key
- open a folder on the remote Linux server
- open a q source code file
- integrated git
- integrated terminal
- features
  - go to definition
  - rename
  - signature help
  - semantic highlight

Discovery Server - Developer and Quant

discover authenticated processes



Demo - Discovery Server

- run a q process with all processes details
- run a golang program to provide REST API
- discovery processes
- connect to a process
- features
  - preview feature on the explorer panel
  - hover to show variable, definition on the process side
  - autocomplete for column names
  - signature help for functions on the process
  - send queries

Demo - q Notebook

out of box q notebook feature

- create a q notebook
- connect a q process
- add a q cell
- add a markdown cell
- grid/virtualization mode
- convert a q notebook to q source code
- already support kx insight chart feature
  I worked with a fund in London for this feature and they confirm it worked

Thank you!

github:
https://github.com/jshinonome/vscode-q-as-a-cloud-ide