//Usefull command line tools you will need if not already installed:

//curl available here:
//https://curl.haxx.se/download.html

//cf available here:
//https://docs.cloudfoundry.org/cf-cli/install-go-cli.html

//jq available here
//https://stedolan.github.io/jq/download/

// GnuWin32 if working on Windows
//https://sourceforge.net/projects/getgnuwin32/files/

// Log to Bluemix in eu-de

cf l -a https://api.eu-de.bluemix.net -u ${userid} -p ${password} --skip-ssl-validation -s ${space} -o ${org}

// Dump market place information in a local file as cf marketplace takes a long time to achieve

cf marketplace | tee marketplace-de

// START Tone Analyzer

// Find Tone Analyzer service name and available plans in local file generated above

grep -i Analyzer marketplace-de

// Create Tone Analyzer service

cf cs tone_analyzer standard ta0

// Create service key (credential) for Tone Analyzer service

cf csk ta0 user0

// Get Tone Analyzer credential and save it for future use.

cf service-key ta0 user0 | awk 'NR > 2 {print}'

// END Tone Analyzer

// START Natural Language Understanding

// Find Natural Language Understanding service name and available plans in local file generated above

grep -i Understanding marketplace-de

// Create Natural Language Understanding service

cf cs natural-language-understanding free nlu0

// Create service key (credential) for Natural Language Understanding service

cf csk nlu0 user0

// Get Natural Language Understanding credential and save it for futur use.

cf service-key nlu0 user0 | awk 'NR > 2 {print}'

// END Natural Language Understanding

// START Discovery

// Find Discovery service name and available plans in local file generated above

grep -i Discovery marketplace-de

// Create Discovery service

cf cs discovery lite dsc0

// Create service key (credential) for Discovery service

cf csk dsc0 user0

// Get Discovery credential and save it for future use.

cf service-key dsc0 user0 | awk 'NR > 2 {print}'

// Create environment for Discovery service

curl -X POST -u ${username}:${password} -H "Content-Type: application/json" -d '{"name": "env0"}' "${url}/v1/environments?version=2017-09-01"

// Get environment_id for Discovery service

curl -u ${username}:${password} "${url}/v1/environments?version=2017-09-01" | jq --arg ENV env0 '.environments[] | select(.name == $ENV) | .environment_id'

// Create configuration for Discovery service with environment_id from above

curl -u ${username}:${password} https://gateway-${url}/v1/environments/${environment_id}/configurations?version=2017-09-01

// Get configuration_id for Discovery service

```
curl -u ${username}:${password} "${url}/v1/environments/${environment_id}/configurations?
version=2017-09-01" | jq '.configurations[] | .configuration_id'
```

// Create collection for Discovery service

```
curl -X POST -u ${username}:${password} -d '{"name": "coll0", "configuration_id":"$
{configuration_id}" , "language": "en_us"}' ${url}/v1/environments/${environment_id}/collections?
version=2017-09-01
```

// Get collection_id for Discovery service

```
curl -u ${username}:${password} "${url}/v1/environments/${environment_id}/collections?
version=2017-09-01" | jq '.collections[] | .collection_id'
```

// END   Discovery

// START Visual Recognition

// Log out from bluemix eu-de

```
cf lo
```

// Log to Bluemix in eu-gb as Visual Recognition is missing in eu-de marketplace

```
cf l -a https://api.eu-gb.bluemix.net -u ${userid} -p ${password} --skip-ssl-validation -s ${space} -o $
{org}
```

// Dump market place information in a local file as cf marketplace takes a long time to achieve

```
cf marketplace | tee marketplace-gb
```

// Find Visual Recognition service name and available plans in local file generated above

```
grep -i Visual marketplace-gb
```

// Create Visual Recognition service

```
cf cs watson_vision_combined free vr0
```

// Create service key (credential) for Visual Recognition service

```
cf csk vr0 user0
```

// Get Visual Recognition credential and save it for future use.

```
cf service-key vr0 user0 | awk 'NR > 2 {print}'
```

// END Visual Recognition