

Provisioning the Natural Language Understanding (NLU) service

Step 1: Log in to IBM Cloud

1. In your browser, go to <https://cloud.ibm.com> and log in.

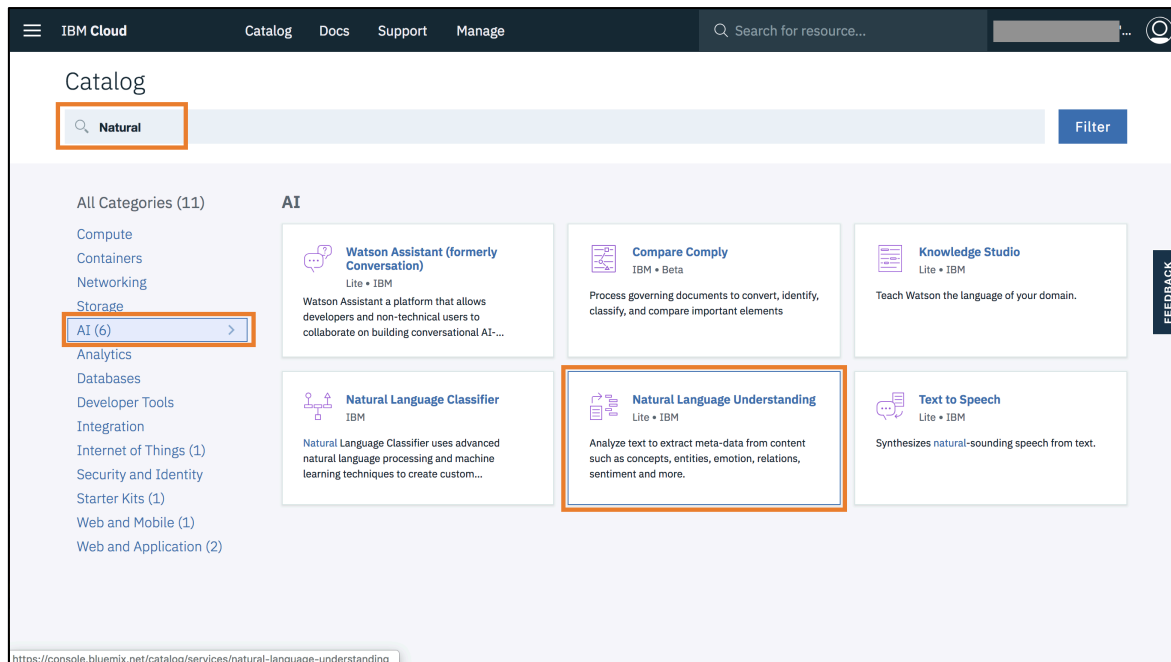
Note: If you're already logged in to IBM Cloud, it should redirect to the IBM Cloud dashboard page automatically.

2. Click **Log in** button, and log in with your intranet ID or your other IBMid,
3. Confirm that you are viewing your IBM Cloud Dashboard.



Step 2: Create a Natural Language Understanding (NLU) service instance

1. Click **Catalog** on the top navigation menu.
2. Type “Natural” into the search field and press **Enter**. Find and click on the **Natural Language Understanding** service (under the AI category).



3. In the Natural Language Understanding service page, fill in the following fields.

- **Service name:** NLU for WKS Lab
- **Region/Location to deploy in:** Dallas
- **Resource group:** Default

Note: You can choose any region and any resource group here, but the region **MUST** be same as the Watson Knowledge Studio instance you have previously created.

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View all Natural Language Understanding Lite • IBM

Use advanced NLP to analyze text and extract meta-data from content such as concepts, entities, keywords, categories, sentiment, emotion, relations, and semantic roles. Apply custom annotation models developed using Watson Knowledge Studio to identify industry/domain specific entities and relations in unstructured text with Watson NLU.

Service name:
NLU for WKS Lab

Choose a region/location to deploy in:
Dallas

Select a resource group:
default

FEEDBACK

4. Scroll down the page and confirm that the **Lite** plan is selected, and then click **Create**.

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Pricing Plans Monthly prices shown are for country or region: Japan

PLAN	FEATURES	PRICING
✓ Lite	30,000 NLU Items Per Month 1 Custom Model NOTE: A NLU item is based on the number of data units enriched and the number of enrichment features applied. A data unit is 10,000 characters or less. For example: extracting Entities and Sentiment from 15,000 characters of text is (2 Data Units * 2 Enrichment Features) = 4 NLU Items. A custom model refers to an annotation model developed with Watson Knowledge Studio.	Free
Standard	Unlimited NLU Items Per Month You will be charged per NLU Item You will be charged per Custom Model NOTE: A NLU item is based on the number of data units enriched and the number of enrichment features applied. A data unit is 10,000 characters or less. For example: extracting Entities and Sentiment from 15,000 characters of text is (2 Data Units * 2 Enrichment Features) = 4 NLU Items. A custom model refers to an annotation model developed with Watson Knowledge Studio.	Expand each section to view details

The Lite plan gets you started with 30,000 NLU Items per month at no cost. This plan also enables use of one custom model published through Watson Knowledge Studio.

Lite plan services are deleted after 30 days of inactivity.

Need Help? [Contact IBM Cloud Support](#) Estimate Monthly Cost [Cost Calculator](#)

Create

FEEDBACK

5. Confirm that you can see the service dashboard page of the created NLU instance.

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Manage Natural Language Understanding / Dashboard /

Service credentials NLU for WKS Lab

Plan Resource Group: default Location: Dallas

Step 3: Try an API call to the Natural Language Understanding service

1. Go through the short Getting started tutorial on the service dashboard page of the Natural Language Understanding service and try out the sample API calls using the curl command in your terminal.

Note: You can copy the sample curl command by clicking the  icon in the top right corner of the example screenshots. If you toggle the Show credentials link near the top of the page, your API key should be automatically inserted into the example curl calls.

2. Examine the format of the curl command to see how you can specify which features you wish to extract (sentiment, keywords, etc.) Customize your curl command as follows:

- **text:** "Revenues from the Software segment were \$6.3 billion, an increase of 12 percent (6 percent, adjusting for currency) compared with the fourth quarter of 2006; pre-tax income increased 21 percent. Revenues from IBM's middleware products, which primarily include WebSphere, Information Management, Tivoli, Lotus and Rational products, were \$5.0 billion, up 13 percent versus the fourth quarter of 2006. Operating systems revenues of \$664 million increased 3 percent compared with the prior-year quarter."
- **features:** { "entities": {} }

You should use the NLU service getting started page, rather than these instructions, to copy the most up-to-date curl command (e.g., the version is likely to be updated over time)

Here is roughly what the sample curl command and its execution result should look like:

[Command]

```
curl -X POST -u "apikey:your-API-key" -H "Content-Type: application/json" -d '{ "text": "Revenue from the Software segment were $6.3 billion, an increase of 12 percent (6 percent, adjusting for currency) compared with the fourth quarter of 2006; pre-tax income increased 21 percent. Revenues from IBM's middleware products, which primarily include WebSphere, Information Management, Tivoli, Lotus and Rational products, were $5.0 billion, up 13 percent versus the fourth quarter of 2006. Operating systems revenues of $664 million increased 3 percent compared with the prior-year quarter.", "features": { "entities": {} } }' "https://gateway.watsonplatform.net/natural-language-understanding/api/v1/analyze?version=2018-11-16"
```

[Result]

```
{
  "usage": {
    "text_units": 1,
    "text_characters": 500,
    "features": 1
  },
  "language": "en",
  "entities": [
    {
      "type": "Company",
      "text": "IBM",
      "relevance": 0.859257,
      "disambiguation": {
        "subtype": [
          "SoftwareLicense",
          "OperatingSystemDeveloper",
          "ProcessorManufacturer",
          "SoftwareDeveloper",
          "CompanyFounder",
          "ProgrammingLanguageDesigner",
          "ProgrammingLanguageDeveloper"
        ]
      }
    }
  ]
}
```

```

        "name": "IBM",
        "dbpedia_resource": "http://dbpedia.org/resource/IBM"
    },
    "count": 1
},
{
    "type": "Quantity",
    "text": "$5.0 billion",
    "relevance": 0.859257,
    "count": 1
},
{
    "type": "Quantity",
    "text": "$6.3 billion",
    "relevance": 0.859257,
    "count": 1
},
{
    "type": "Quantity",
    "text": "$664 million",
    "relevance": 0.859257,
    "count": 1
},
{
    "type": "Quantity",
    "text": "12 percent",
    "relevance": 0.859257,
    "count": 1
},
{
    "type": "Quantity",
    "text": "13 percent",
    "relevance": 0.859257,
    "count": 1
},
{
    "type": "Quantity",
    "text": "21 percent",
    "relevance": 0.859257,
    "count": 1
},
{
    "type": "Quantity",
    "text": "3 percent",
    "relevance": 0.859257,
    "count": 1
},
{
    "type": "Quantity",
    "text": "6 percent",
    "relevance": 0.859257,
    "count": 1
}
]
}

```

Click on “View the [API reference](#)” at the bottom of the Getting Started page to get more detailed information about the NLU API documentation.