



Windows Azure

+



python<sup>TM</sup>



# Web App erstellen

→ <https://portal.azure.com>

The screenshot shows the Azure portal interface for creating a new web application. On the left, a sidebar lists various service categories: STARTSEITE, BENACHRICHTEN, DURCHSUCHEN, AKTIV, ABRECHNUNG, and NEU. The 'NEU' button is highlighted with a large red arrow pointing towards the center. In the main area, under the 'Erstellen' tab, the 'Web + Mobile' category is selected, indicated by a red arrow. A detailed view of the 'Web App' service is shown on the right, with its icon (a globe), name, and description: 'Enjoy secure and flexible development, deployment, and scaling options for your web'. Below it are other service options: Azure Mobile App, Logic app, API App, and API Management. The 'Web App' section includes fields for 'URL' (with placeholder 'Geben Sie den Namen ein' and suffix '.azurewebsites.net'), 'NEUEN APPSERVICE-PLAN ERSTELLEN', 'PREISSTUFE', 'NEUE RESSOURCENGROEPPE ERSTELLEN', 'ABONNEMENT', and a checked checkbox for 'Zum Startmenü hinzufügen'. A large red arrow points from the 'Web App' section towards the bottom right corner of the screen.

# Python aktivieren

Einstellungen  
BLUB12

Web-App-Einstellungen  
BLUB12

Speichern Verwerfen

Sucheinstellungen

- Eigenschaften >
- Anwendungseinstellungen > 
- Skalieren >
- Authentifizierung/Autorisier... >
- Benutzerdefinierte Domänen... >

Allgemeine Einstellungen

.NET Framework-Version ⓘ v3.5 v4.5

PHP-Version ⓘ Aus 5.4 5.5 5.6

Java-Version ⓘ Aus 1.7.0\_51

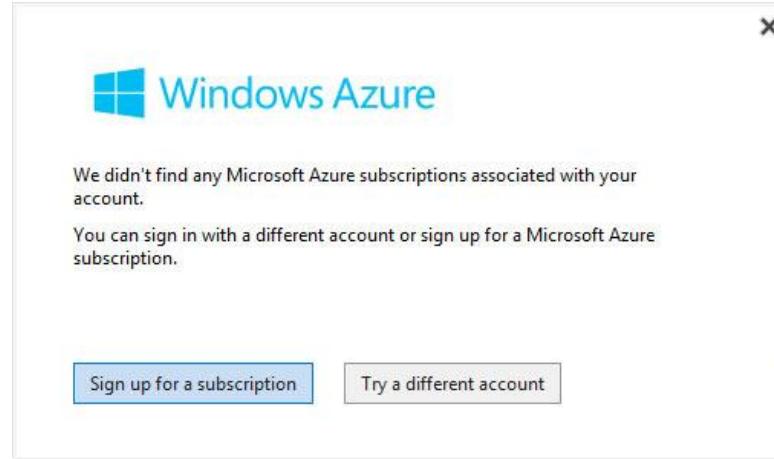
Webcontainer ⓘ Tomcat 7.0.50 Je 2131115

Python-Version ⓘ Aus 2.7 3.4



# Deployment

→ Visual Studio



→ FTP

→ keine Installation von dependencies

→ GIT Repository

→ einfach, kaum Konfigurationsaufwand

# Python Besonderheiten

→ Es werden zusätzliche Dateien benötigt

- **runtime.txt** (Python Version)
  - „python-2.7“ oder „python-3.4“
- **requirements.txt** (dependencies)
- **web.config** (Server Konfiguration)
- **ptvs\_virtualenv\_proxy.py** (IIS Proxy)

# web.config

→ Erstellung nicht trivial!

- Verwendung von Frameworks (Django etc.)
  - Meist eigene web.config nötig
- Microsoft liefert config für einige Frameworks
  - Aber nicht für Dreamspark Benutzer ☺

# Implementierung

## WSGI Application

```
def wsgi_app(environ, start_response):
    request = Request(environ)
    status = '200 OK'
    try:
        trace = routes(request)
        view = trace.target
        args = inject_args(trace.target, trace.args,
                           request=request)
        kwargs = trace.kwargs
        response = view(*args, **kwargs)
    except NoURLPatternMatched as e:
        status = '404 Not Found'
        response = 'The resource could not be located'
    except exc.HTTPEException as e:
        status = '500 Internal server error'
        response = 'An error occurred while processing
                   your request'
    response_headers = [('Content-type',
                        'application/json')]
    start_response(status, response_headers)
    yield response.encode()
```

## Router

```
routes = route("", route("/wiki",
                         route(GET, "/count-images/{title:string}",
                               router.wiki.countimages),
                         )),
route("/calc",
      route(POST, "/", router.calc.index),
      )
)
```



# Links

- <http://blub12.azurewebsites.net/wiki/count-images/>
  - [http://blub12.azurewebsites.net/wiki/count-images/San Francisco](http://blub12.azurewebsites.net/wiki/count-images/San_Francisco)
- <http://blub12.azurewebsites.net/calc/>