

Upgrade to DSpace 7

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Descry
TECHNOLOGIES

Background

Who am I?

- Founder of Descry Technologies, addressing a niche in data analytics and repositories in South Africa
- Currently employed as a database specialist at Stellenbosch University
- Formerly the systems administrator responsible for SUNScholar, SUNDigital collections, and a number of subject repositories hosted by Stellenbosch University Library and Information service
- Recently launched the SARUA subject repository, and upgraded SUNScholar with the SU LIS team. More to come soon.



Overview

What we'll cover

1. Why upgrade?
2. Differences between DSpace 6 and DSpace 7, in brief
3. How to prepare for the upgrade/migration process
4. The upgrade process
5. What remains when the upgrade is done
6. Hands-on upgrade
7. Links to resources to make your upgrade process smoother



Why upgrade now?

There's a deadline looming

DSpace 5 and 6 End-of-Life (EOL) Dates

The DSpace Steering Group announces that security support for DSpace 5.x and 6.x will end on the following dates:

- **DSpace 5.x: Support ended on January 1, 2023**
- **DSpace 6.x: Support ends on July 1, 2023**

This means that *after* those dates:

- That version of DSpace will be considered “end-of-life” (EOL)
- Future minor releases of that major version will not occur
- Bugs affecting those releases will not be addressed
- Security vulnerabilities affecting those releases will not be addressed

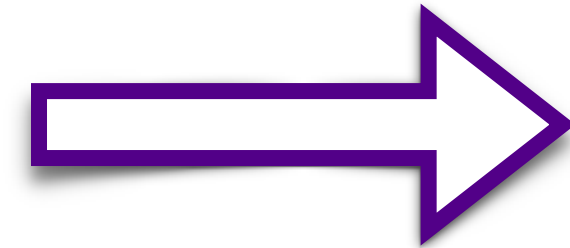
We recommend all institutions upgrade to [DSpace 7](#) as soon as possible.



Major differences

DSpace 6.4 → DSpace 7.5

- Java backend and frontend
- Packaged Solr
- input-forms.xml

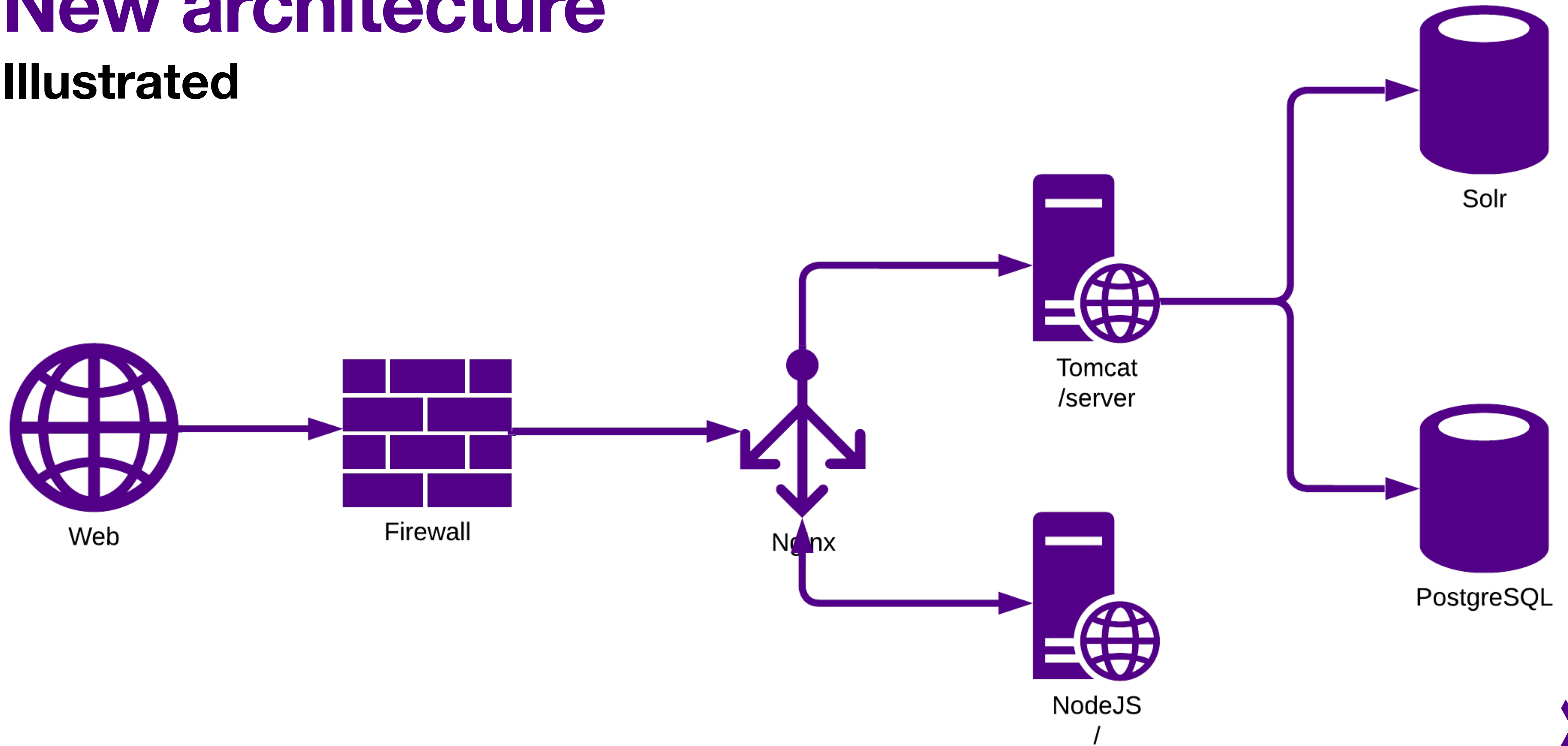


- Java backend
- **Angular frontend**
- **No packaged Solr**
- **submission-forms.xml**



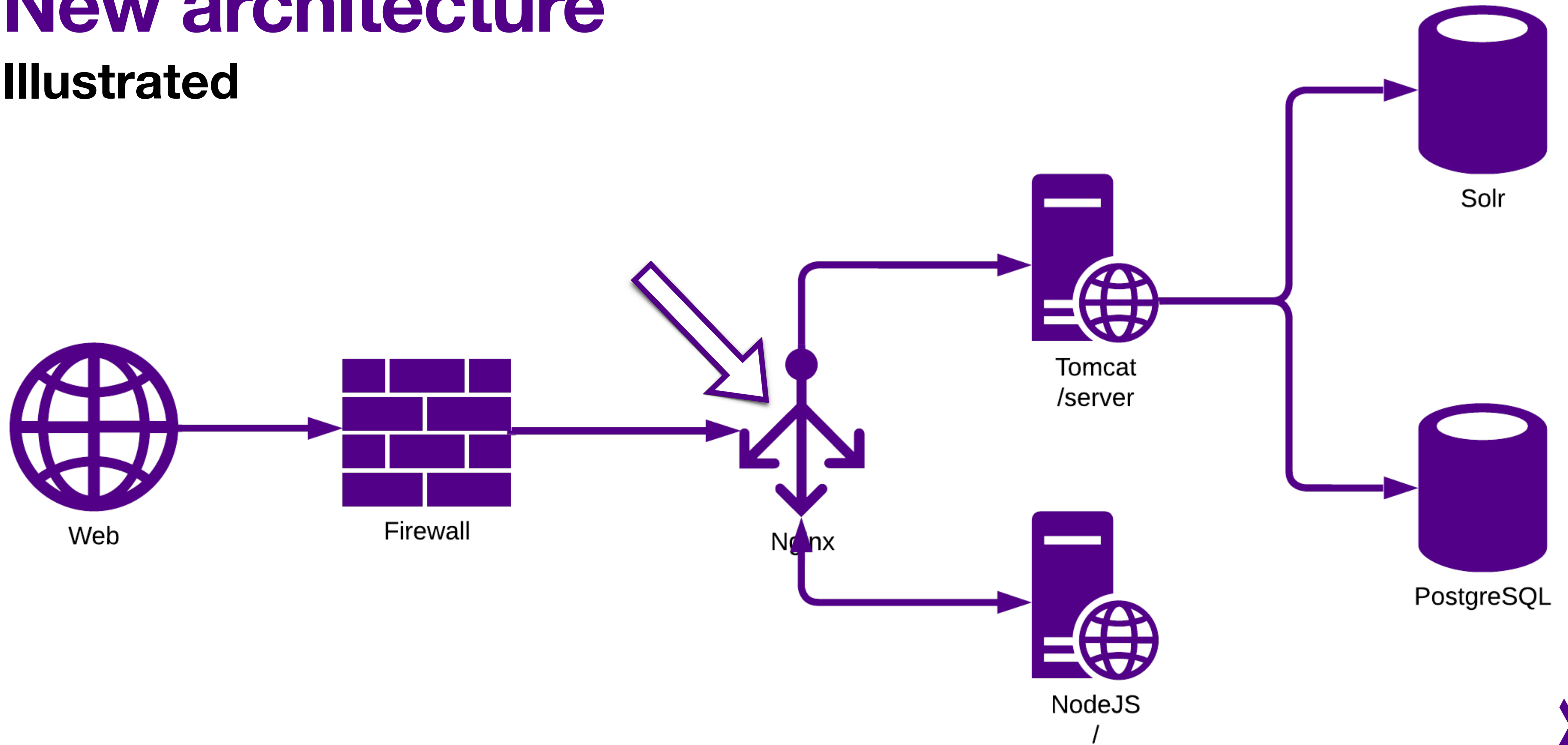
New architecture

Illustrated



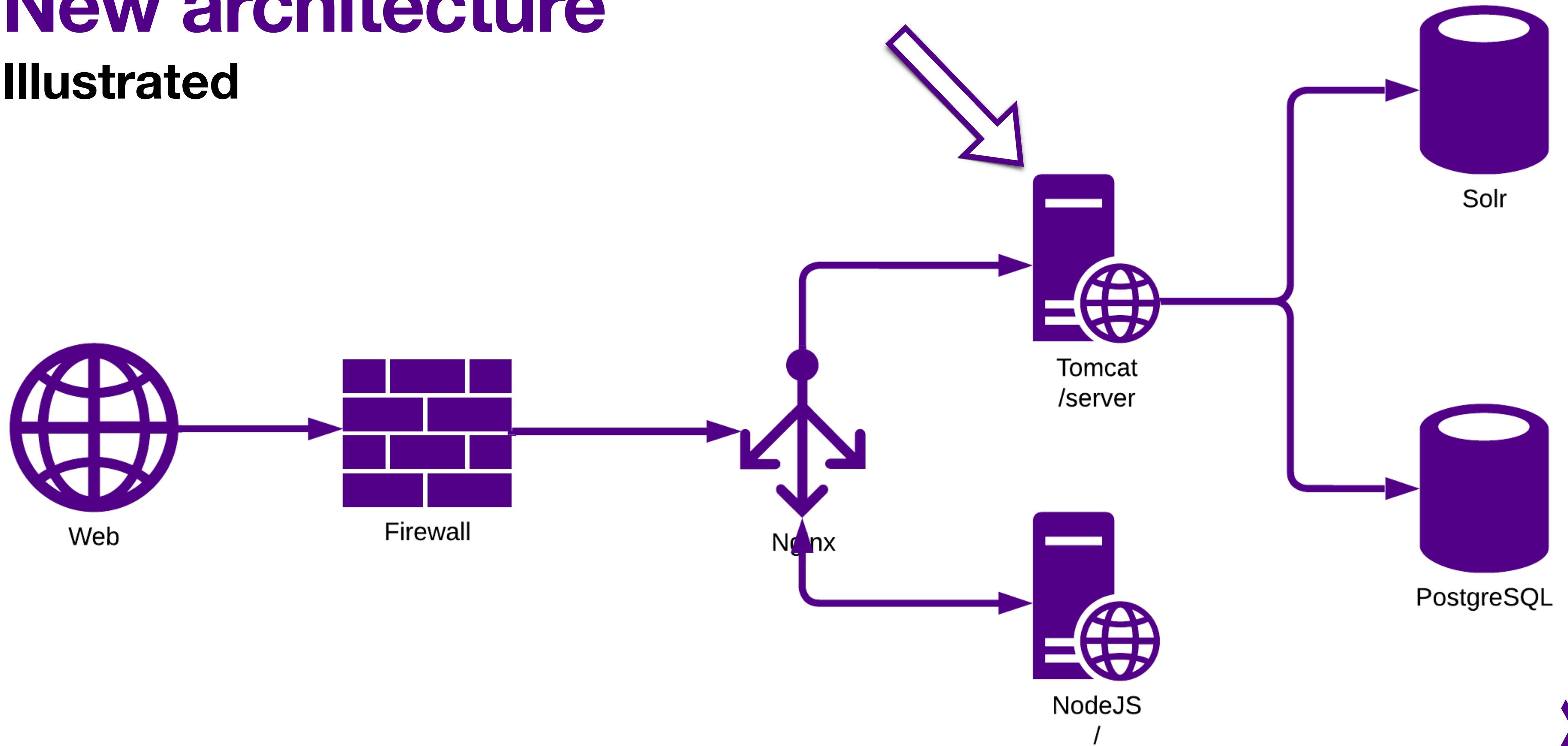
New architecture

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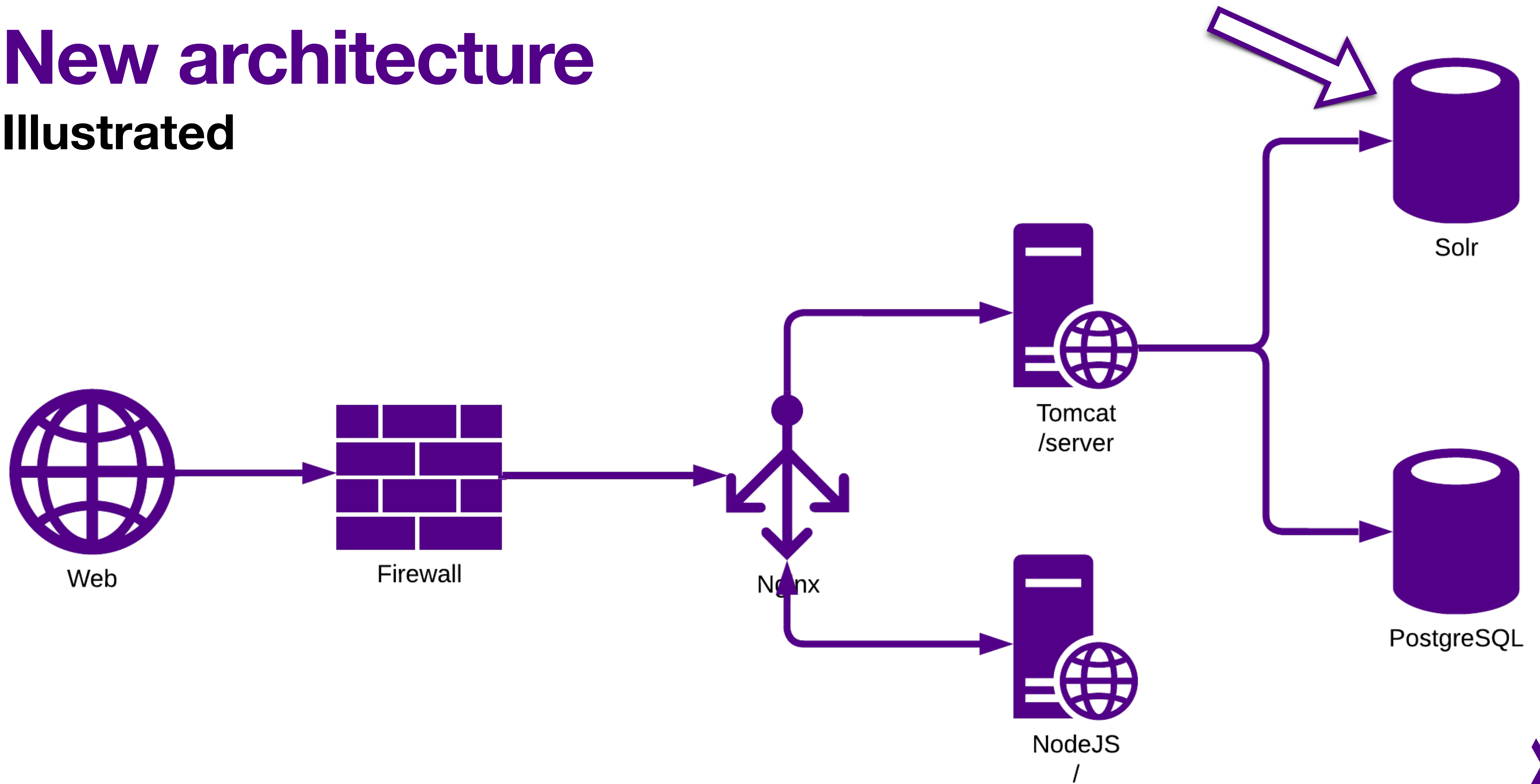
New architecture

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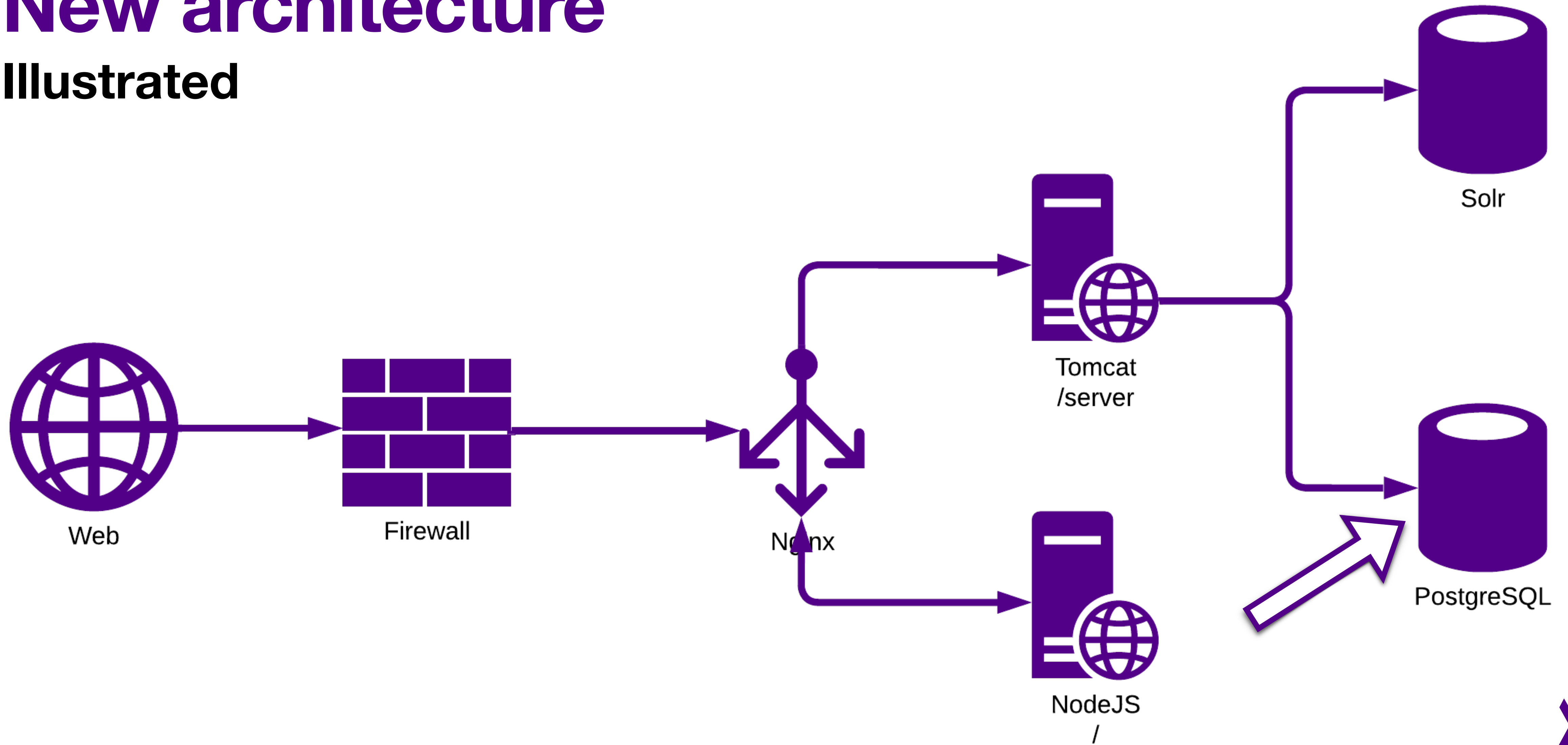
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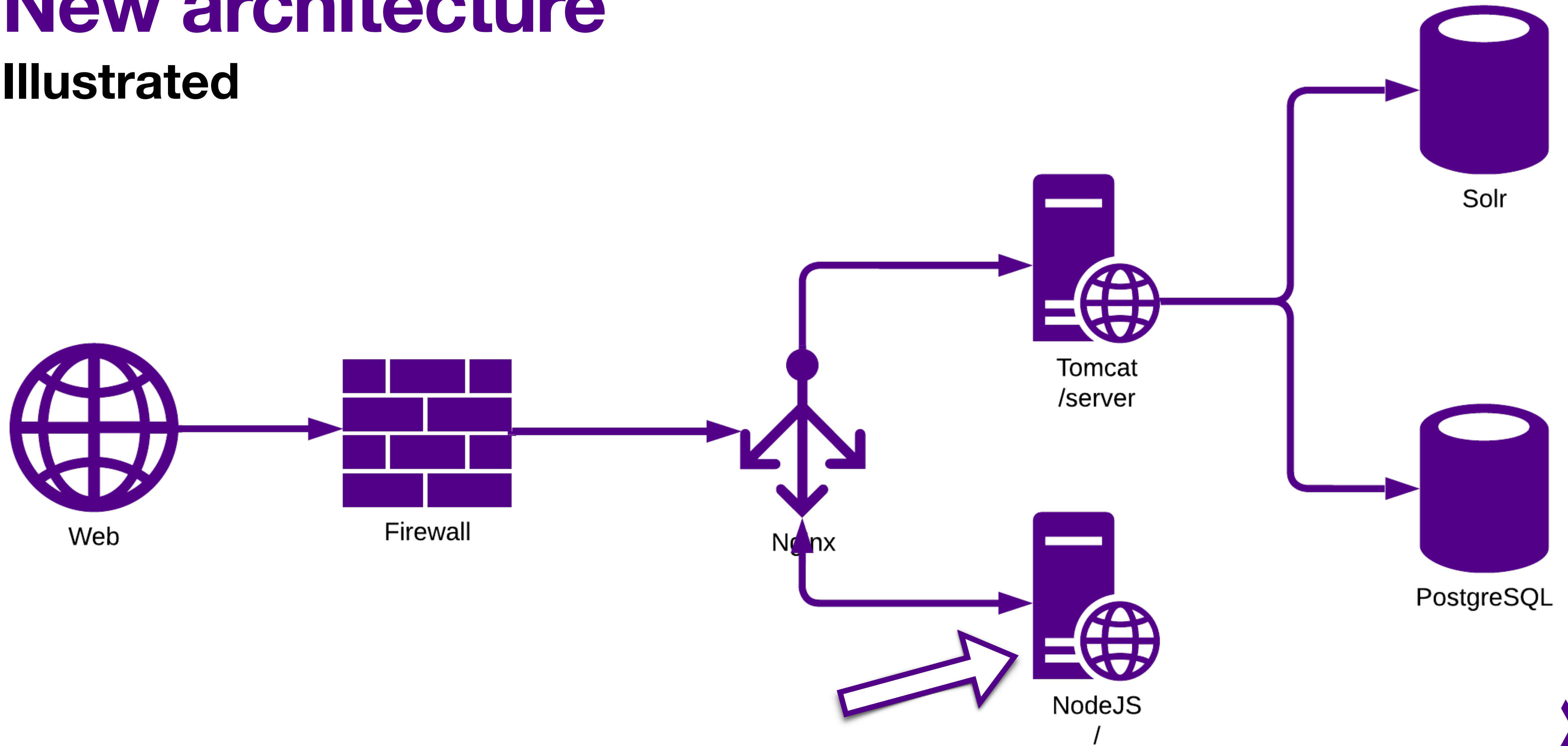
New architecture

Illustrated



New architecture

Illustrated



Preparation

Before the upgrade

- XMLUI and JSPUI are no longer supported
- New submission form format
- ElasticSearch usage statistics removed
- Solr no longer ships with DSpace
- GeoIP DB no longer ships with DSpace



Upgrading (1)

The backend is fairly standard

- Back up database/assetstore/**Solr***/existing DSpace
- Upgrade the prerequisites
- Install a new copy of DSpace and copy the assetstore and Solr files
- Configure the new installation
- Run the database migration

*Solr requires additional work - the cores need to be exported and migrated



Upgrading (2)

The frontend is new

- Install NodeJS and its prerequisites
- Configure the Angular frontend
- Build the frontend
- Copy the files to the production service
- Start the NodeJS server



Refining

Styles and logos

- There are two example themes to copy, based on your needs
 - dspace
 - custom
- The eager-themes file
- The /assets directory: favicon, logo, etc.
- Rebuilding and using your theme



Hands-on upgrade

Resources

For reference

- These slides: descry.org/or2023
- Shortcut to the official upgrade wiki: descry.org/dsp7
- Shortcut to the official DSpace 6 EOL notice: descry.org/dsp6
- Future notes on DSpace will appear here: descry.org
- SOS: contact@descry.org



Workshop reference

- DSpace 6 frontend: <http://localhost:8088>
- DSpace 7 frontend: <http://localhost:8088>
- DSpace 7 backend: <http://localhost:8088/server>

- DSpace credentials: user **root@localhost**, password **123456**

- `docker run --name dspace -p 8088:8088 -p 8983:8983 descry/or2023:latest`
- `docker pull descry/or2023:latest`

