



Open source supply chain planning software

Introduction for IT managers

Agenda

- Architecture
- Tools & technologies used
- Data elements
- Data integration

Technical architecture



Browser based user interface

- Support for all modern popular browsers

HTTP(S)



frePPLe

Linux or Windows

Typical:

Quad core CPU

8GB RAM

Web application layer

- Apache web server
- Written in Python, extendible with addons

Planning engine

- Running in batch mode (scheduled or triggered by user) or continuous mode (as a memory-resident web service)
- Written in C++

Database layer

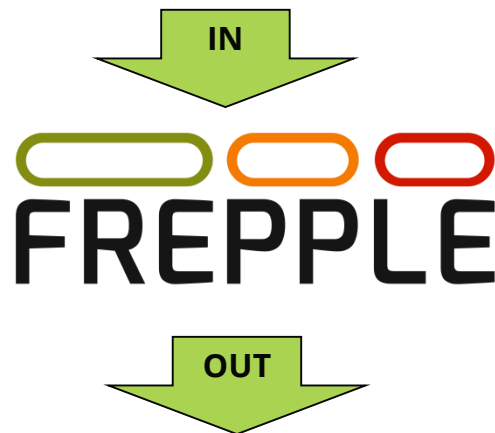
- PostgreSQL

Technical architecture

- Open and extendible framework
 - Addon plugins can:
 - Add new data models
 - Add custom attributes
 - Add new reports
 - Customize menus
 - Customize planning logic
 - Integrate with other systems
 - ...
- Built on a 100% open source stack of software components
 - Browser-based user interface
 - HTML, CSS (bootstrap), javascript (Jquery, Angular)
 - Server-side web application
 - Python, Django, SQL, Apache + mod_wsgi
 - Core planning library
 - C++, Python

Data elements

Locations	
Items	Inventory
Suppliers	Sales orders
Resources	Open manufacturing orders
Customers	Open purchase orders
Bills of material	Open distribution orders
Bills of distribution	



Proposed new purchase orders
Proposed new manufacturing orders
Proposed new distribution orders

FrePPL can be used as a standalone tool by the planner



The planner loads and maintains all data directly in the application

OR

FrePPL can be deployed integrated with other enterprise applications

Automated data interfaces bring the input data and retrieve the planning results

Data integration

- Flexible integration with other enterprise systems
 - ERP, shop floor control system, ...
- Standard connectors for  
- Integration technologies
 - Excel upload & download from the user interface
 - Easy for end users
 - CSV upload & download
 - Suitable for bulk loading of data
 - REST web service
 - Suitable for incremental data updates
 - Database-level integration
 - Low level and highest performance for ETL tools

Try it out yourself

Online demos can be accessed at:

<https://manufacturing.frepple.com>

<https://distribution.frepple.com>

User : admin

Password : admin

Hint:

Use the "guided tour" to walk through the "day-in-the-life" workflows