

YottaDB Update

K.S. Bhaskar

bhaskar@yottadb.com

- A mature, high performance, hierarchical key-value NoSQL database whose code base scales up to mission-critical applications like large real-time core-banking and electronic health records, and also scales down to run on platforms like the Raspberry Pi Zero, as well as everything in-between.
- *Rock Solid. Lightning Fast. Secure. Pick any three.*

YottaDB is a registered trademark of YottaDB LLC

It's All About Data

- Languages are like religions
 - I'll change mine if you'll change yours
 - (But you go first...)
- Language agnostic access to data
 - Any language, any platform, anywhere
 - (At least, that's the goal...)

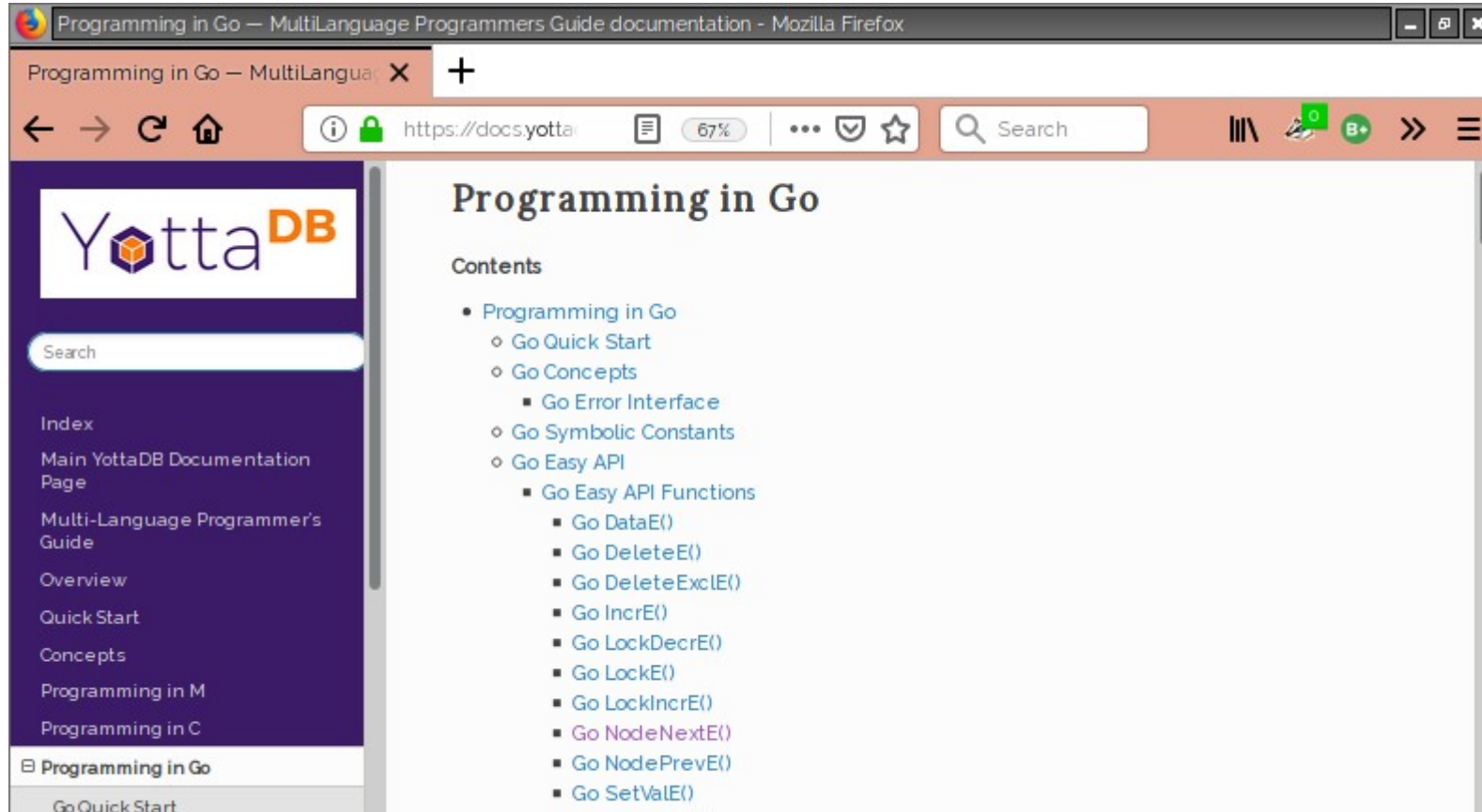
Key-Value Model is Common

- M local/global variables
- XML
- JSON
- And extends to other data models
 - <http://mgateway.com/docs/universalNoSQL.pdf>
- Including relational (more later...)

C – Computing Lingua Franca

- Native C API added r1.20 (March 2018)
- Functions added to support threaded applications r1.24 (January 2019)
- Additional languages supported via wrappers

Go – Field Test Grade Available Today

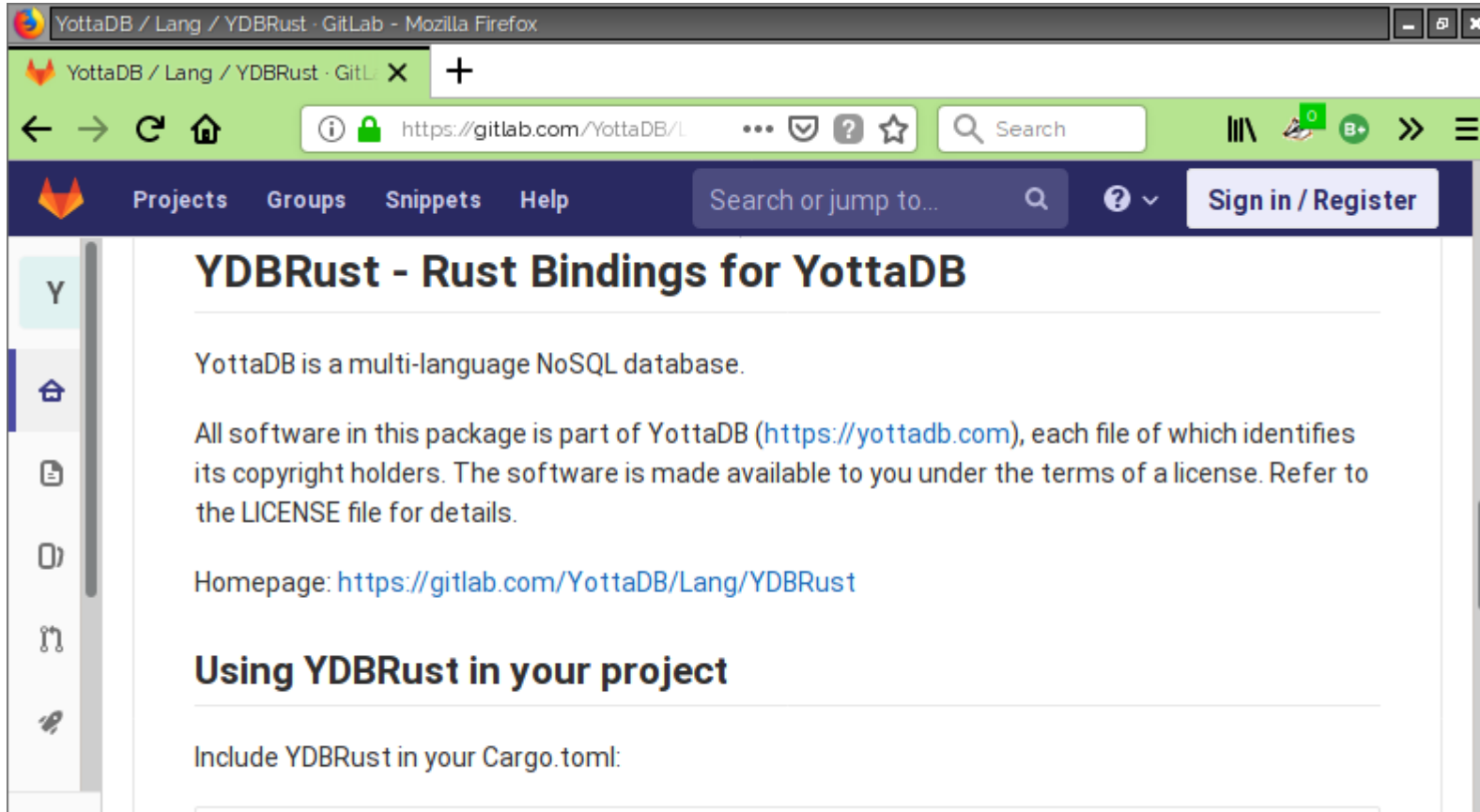


The screenshot shows a Mozilla Firefox browser window with the address bar displaying 'https://docs.yotta'. The page title is 'Programming in Go – MultiLanguage Programmers Guide documentation'. The main content area is titled 'Programming in Go' and contains a 'Contents' section with a list of links:

- Programming in Go
 - Go Quick Start
 - Go Concepts
 - Go Error Interface
 - Go Symbolic Constants
 - Go Easy API
 - Go Easy API Functions
 - Go DataE()
 - Go DeleteE()
 - Go DeleteExclE()
 - Go IncrE()
 - Go LockDecrE()
 - Go LockE()
 - Go LockIncrE()
 - Go NodeNextE()
 - Go NodePrevE()
 - Go SetValE()

The left sidebar contains the YottaDB logo, a search bar, and a navigation menu with the following items: Index, Main YottaDB Documentation Page, Multi-Language Programmer's Guide, Overview, Quick Start, Concepts, Programming in M, Programming in C, Programming in Go (highlighted), and Go Quick Start.

Rust – Usable Prototype Available



The screenshot shows a web browser window displaying the GitLab repository page for YDBRust. The browser's address bar shows the URL `https://gitlab.com/YottaDB/L`. The page title is "YDBRust - Rust Bindings for YottaDB". The main content area contains the following text:

YottaDB is a multi-language NoSQL database.

All software in this package is part of YottaDB (<https://yottadb.com>), each file of which identifies its copyright holders. The software is made available to you under the terms of a license. Refer to the LICENSE file for details.

Homepage: <https://gitlab.com/YottaDB/Lang/YDBRust>

Using YDBRust in your project

Include YDBRust in your Cargo.toml:

Python – Coming soon



node.js – thank you, David Wicksell!

The screenshot shows a web browser window displaying the GitHub repository page for 'dlwicksell/nodem'. The browser's address bar shows the URL 'http://github.com/dlwicksell/nodem'. The repository page features a navigation bar with tabs for 'Code', 'Issues 0', 'Pull requests 0', 'Wiki', 'Releases 13', and 'More'. Below the navigation bar, the repository description reads 'A YottaDB and GT.M database driver and language binding for Node.js'. A summary bar indicates '47 commits', '1 branch', '13 releases', and '2 contributors'. A dropdown menu shows the current branch is 'master', and a 'Create new file' button is visible. The commit history shows a recent commit by 'dlwicksell' titled 'Fix support for YottaDB r1.24'. Below the commit, two files are listed: 'examples' and 'lib', both with the description 'Add asynchronous API support for another four APIs'.

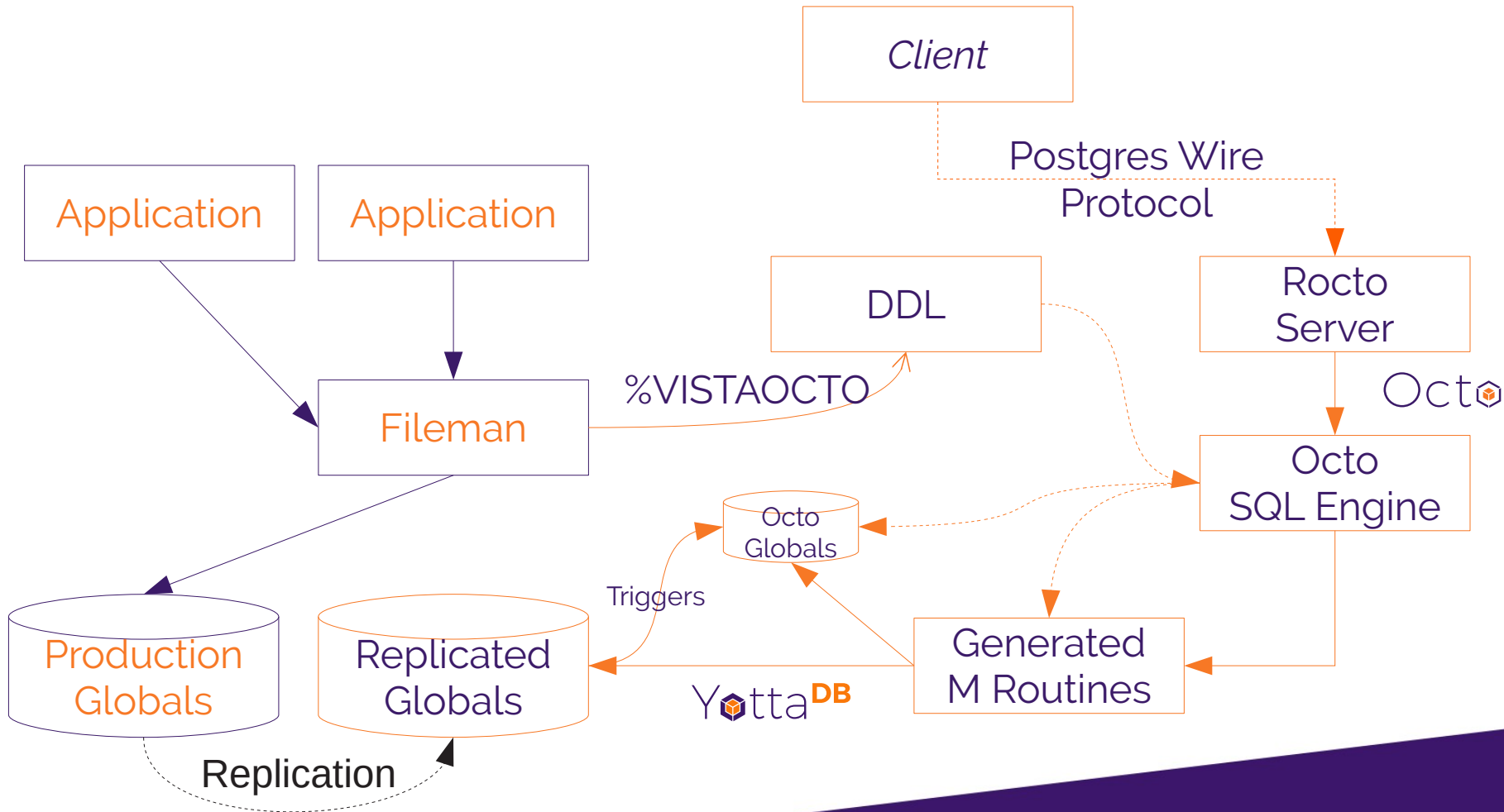
Perl – thank you, Stefan Traby!

The screenshot shows a Mozilla Firefox browser window with the URL `https://metacpan.org`. The page title is "YottaDB - Perl extension for accessing YottaDB". The main content area displays the "meta::cpan" logo and a search bar. Below the logo, the page title is "Stefan Traby / YottaDB-0.24 / YottaDB". The date "FEB 14, 2019" is shown. The distribution information is "Distribution: YottaDB" and "Module version: 0.24". A sidebar on the left contains links for "Source (raw)", "Browse (raw)", "Changes", "How to Contribute", "Issues", "Testers (0 / 0 / 0)", "Kwalitee", "% Coverage", and "License: unknown". The main content area has a "Contents" section with links for "NAME", "SYNOPSIS", "DESCRIPTION", "FUNCTIONS", "SEE ALSO", "AUTHOR", and "COPYRIGHT AND LICENSE". The "NAME" section is expanded, showing "YottaDB". To the right of the contents is a square image with a pink and white geometric pattern, labeled "OESI" and "Stefan Traby". Below the image, the "DEPENDENCIES" section is visible, listing "JSON" and "POSIX::AtFork".

Octo

- Octo is a SQL database engine that whose tables are stored in global variables

Octo Production Configuration



Status

- Initial target is read-only access
- Currently in alpha test – working with a friendly user as we develop functionality
- Beta test starts Monday, July 8

Training – Mon, Jul 8, Bethesda, MD

2019 OSEHRA OPEN SOURCE SUMMIT JULY 9 - 10
BETHESDA NORTH MARRIOTT HOTEL & CONFERENCE CENTER

Home Register

2019 Summit Sponsorship Rates Pre-Summit Training Location + Travel OSEHRA Contact Us FAQs

f t in

Pre-Summit Training Course

Get the most out of your 2019 OSEHRA Summit experience this July by signing up for our new Pre-Summit Training Course, *SQL Reporting of VistA Data*, led by YottaDB LLC's Christopher Edwards. YottaDB has partnered with OSEHRA to offer on-site technical training at the Bethesda North Marriott Hotel and Conference Center prior to the start of the 2019 OSEHRA Summit, on Monday, July 8th 2019. This single-day class will demonstrate and explore how to use SQL to access VistA for statistical analysis and reporting.

Course Overview
VistA is a powerful free/open source transactional system for electronic health records. Adding SQL access to VistA enables statistical analysis tools that can help you get even more value from the data. Join us to discover some of the most powerful, standard, off-the-shelf tools available that use SQL to access data. Attendees will leave with a running VistA system that has SQL access from selected free/open source SQL clients (Squirrel SQL – <http://www.squirrelsql.org> – is the current target).

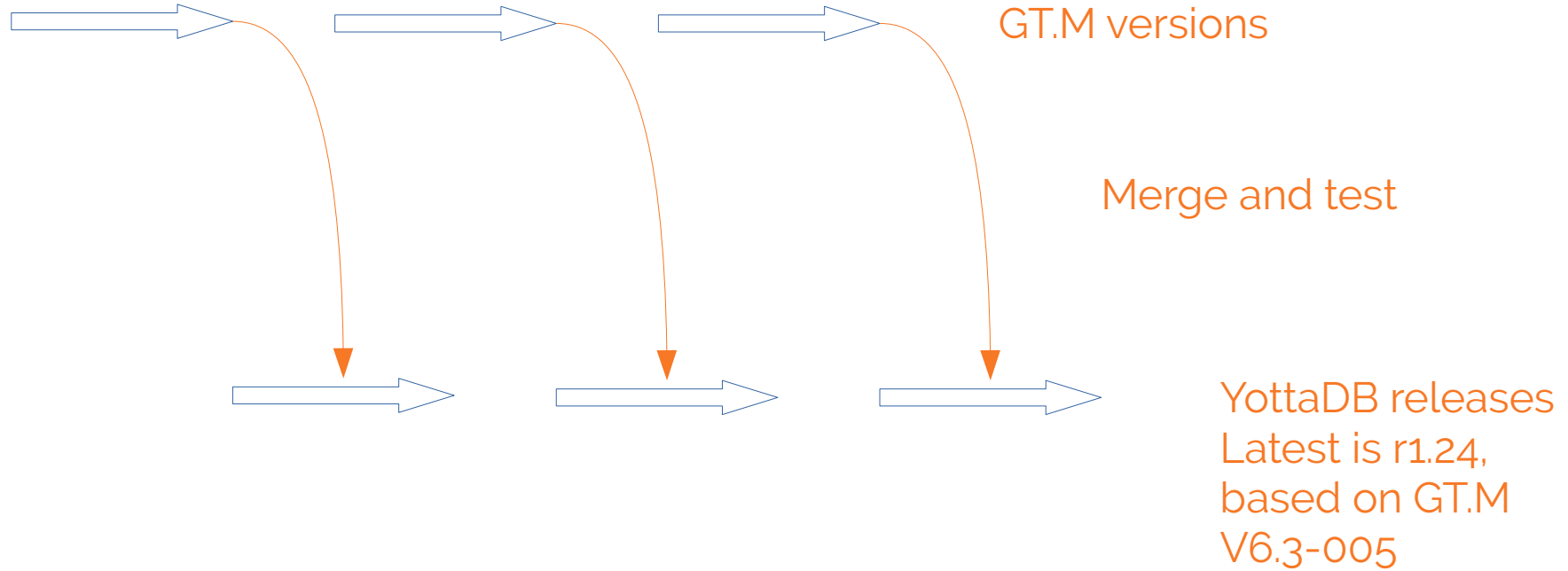
This will be a hands-on class, and you will need to bring your own computer. The class will be taught using a Docker image provided by the instructor. This image will contain a VistA system pre-populated with synthetic patient data that runs YottaDB on Linux, using Octo by YottaDB for SQL access. Though this Docker image will be used for training, the techniques learned in this training will be largely applicable and pertinent to other VistA systems.

Bring your
laptops!

And More

- GUI
 - Initially GDE
- Support for 64-bit Linux on ARM
- Performance & functional enhancements; bug fixes
- New demos
- All 100% FOSS – <https://gitlab.com/YottaDB>

Staying Compatible with Upstream



Attempting to Reach New Users

- FOSSCON, Philadelphia (August)
- Northwest Linux Festival, Bellingham, WA (May)
- *SouthEast LinuxFest, Charlotte, NC (June)*
- *All Things Open, Raleigh, NC (August)*
- *(Maybe) Ohio Linux, Columbus, OH (November)*

Suggestions welcome!



YottaDB

Thank You!

yottadb.com