DISCLAIMER

During the course of this presentation, TIBCO or its representatives may make forward-looking statements regarding future events, TIBCO's future results or our future financial performance. Although we believe that the expectations reflected in the forward-looking statements contained in this presentation are reasonable, these expectations or any of the forward-looking statements could prove to be incorrect and actual results or financial performance could differ materially from those stated herein.

TIBCO could experience factors that could cause actual results or financial performance to differ materially from those contained in any forward-looking statement made in connection with this presentation. TIBCO does not undertake to update any forward-looking statements that may be made from time to time or on its behalf.

This document (including, without limitation, any product roadmap or statement of direction data) illustrates the planned testing, release and availability dates for TIBCO products and services. This document is provided for informational purposes only and its contents are subject to change without notice. TIBCO makes no warranties, express or implied, in or relating to this document or any information in it, including, without limitation, that the information is error-free or meets any conditions of merchantability or fitness for a particular purpose. This document may not be reproduced or transmitted in any form or by any means without our prior written permission.

The material provided is for informational purposes only, and should not be relied on in making a purchasing decision. The information is not a commitment, promise or legal obligation to deliver any material, code, or functionality. The development, release, and timing of any features or functionality described for our products remains at our sole discretion.
**Why Cloud BI?**

- I want to keep the platform running without a dedicated team of BI administrators.
- I want to have an up-to-date hardware environment without having to run and maintain it.
- I want to upgrade quickly to the latest features.
- I want to spend more time helping my business realize the business value of analytics rather than operating BI.
- I want to start small and scale out/in as my capacity requirements change.
Data Gravity

On premises BI

Cloud BI

Finance Data
HR Data
Supply Chain Data
This document (including, without limitation, any product roadmap or statement of direction data) illustrates the planned testing, release and availability dates for TIBCO products and services. It is for informational purposes only and its contents are subject to change without notice. © Copyright 2000-2017 TIBCO Software Inc. All rights reserved. TIBCO Proprietary Information.
Data Gravity

Finance Data
HR Data
Supply Chain Data

Supplier Data?
Customer Data?
Sales Data
Marketing Data

On premises BI

Cloud BI

This document (including, without limitation, any product roadmap or statement of direction data) illustrates the planned testing, release and availability dates for TIBCO products and services. It is for informational purposes only and its contents are subject to change without notice. © Copyright 2000-2017 TIBCO Software Inc. All rights reserved. TIBCO Proprietary Information.
51% businesses surveyed were either already using BI in the cloud or plan to do it within the next 12 months.

Source: Data from Gartner Magic Quadrant for business intelligence and analytics platforms, 2017 survey, n = 1702
What is Hybrid Cloud BI?

- Hybrid Cloud BI is a BI environment which uses a mix of on-premises, private cloud and public cloud services.
- It allows you to start on premises and move to the cloud at your own pace, e.g.
  - Transfer assets between the two environments.
  - Connect to on premises data from the cloud in a secure way without moving all of your data into the cloud.
  - Use Cloud Services from within your on premises BI environment.
Why Hybrid Cloud BI?

• Keep some data on premises
• Add a new department using cloud while keeping some departments using the on premises environment
• Create temporary capacity for training
Smart Visual Analytics

Beautiful | Immersive | Smart | Collaborative | Configurable
Teardown
A Basic On Premises Architecture
A Hybrid Cloud Environment

On Premises

TIBCO Spotfire(R) web clients

TIBCO Spotfire(R) Analyst client

Corporate Data Center
A Hybrid Cloud Environment

This document (including, without limitation, any product roadmap or statement of direction data) illustrates the planned testing, release and availability dates for TIBCO products and services. It is for informational purposes only and its contents are subject to change without notice. © Copyright 2000-2017 TIBCO Software Inc. All rights reserved. TIBCO Proprietary Information.
A Hybrid Cloud Environment
A Hybrid Cloud Environment

This document (including, without limitation, any product roadmap or statement of direction data) illustrates the planned testing, release and availability dates for TIBCO products and services. It is for informational purposes only and its contents are subject to change without notice. © Copyright 2000-2017 TIBCO Software Inc. All rights reserved. TIBCO Proprietary Information.
Fault Tolerance

- Two TIBCO Spotfire Servers is typically enough for most environments.
- Settings and configurations automatically synchronized between clustered servers.
- Configure Library storage for high availability using Amazon® Relational Database Service or equivalent.
Scaling Out Compute Resources

- More concurrent applications
- More concurrent users
- Larger datasets
- More complex computations
- More user interactions
- Faster response times
Scaling Out Library Storage

- Minimize the size of your Spotfire database by storing your organization's Spotfire library content (analyses and analysis data) in the cloud using AWS S3™, or in a file system elsewhere.
Centralized Service Deployment and Upgrades

- Set up a new Spotfire environment
- Install a product upgrade, extension, or hotfix provided by Spotfire
- Install a custom tool or extension
Auto Scaling – Best Practices

- Auto-trust
- Template files
- Automatic deployment

```
{
  "services" : [ {
    "capability" : "WEB_PLAYER",
    "deploymentArea" : "Production",
    "configuration" : "Web Player Configuration",
    "customPrefix" : "Prefix",
    "resourcePool" : "Pool A",
    "instances" : 2,
    "port" : 9501
  }
},
  "strict" : "false"
}
```
Built-in Routing

• Balance resource needs with end user interaction latency while protecting the system and active users

• Default routing behavior:
   1. If analysis is open by a user and a new user request the same analysis, the new user will be directed to the same Web Player Instance
   2. Else, analysis is opened on the Web Player Instance that is least busy
Resource Partitioning

• Separate mission critical applications from experimental use

• Set aside resource pools for computational intensive work, complex scheduled update runs etc

• Give VIP users their own dedicated compute power

• ....
Pre-Load important applications into memory

• Pre-load specific analysis and reduce load time for end users at the expense of continuous resource usage (memory) using scheduled updates.

• Use disk cache for faster restarts

• Allocate a resource pool to an analysis with scheduled updates to dynamically scale as load increases.
Resource Partitioning Using Sites
New in Spotfire 7.9

• Reduces the impact of network latency between servers that are located in different geographic regions.

• Enable different authentication methods for different sets of users who share a Spotfire implementation.
Ready for Remote Configuration

• Comprehensive command line configuration interface makes it possible to use Saltstack or other remote configuration tools to automate configuration.

# Run this script from the command-line using the following command:
# config run simple-config.txt
# Before using this script you need to set the variables below:
set DB_DRIVER = "tibcosoftwareinc.jdbc.oracle.OracleDriver"
set DB_URL = "jdbc:tibcosoftwareinc:oracle://<server>:<port>;SID="
set DB_DRIVER = "tibcosoftwareinc.jdbc.sqlserver.SQLServerDriver"
set DB_URL = "jdbc:tibcosoftwareinc:sqlserver://<server>:<port>";DatabaseName=<database name>"
set DB_USER = "<db username>"
set DB_PASSWORD = "<db password>"
set CONFIG_TOOL_PASSWORD = "<config tool password>"
set ADMIN_USER = "<admin username>"
set ADMIN_PASSWORD = "<admin password>"
echo Creating the database connection configuration bootstrap --no-prompt --driver-class=${DB_DRIVER} --database-url="${DB_URL}" --username=${DB_USER} --password=${DB_PASSWORD} --toolpassword=${CONFIG_TOOL_PASSWORD}"
echo Creating the default configuration create-default-config echo Creating the database connection configuration bootstrap --no-prompt --driver-class=${DB_DRIVER} --database-url="${DB_URL}" --username=${DB_USER} --password=${DB_PASSWORD} --toolpassword=${CONFIG_TOOL_PASSWORD}"
echo Creating the default configuration create-default-config echo Importing the configuration import-config --tool-password="${CONFIG_TOOL_PASSWORD}" --comment="First config" echo Creating the user "${ADMIN_USER}" to become administrator create-user --tool-password="${CONFIG_TOOL_PASSWORD}" --username="${ADMIN_USER}" --password="${ADMIN_PASSWORD}" echo Promoting the user "${ADMIN_USER}" to administrator promote-admin --tool-password="${CONFIG_TOOL_PASSWORD}" --username="${ADMIN_USER}"
Deployment Options

Visual Analytics Software

Installation

Operation

<table>
<thead>
<tr>
<th></th>
<th>TIBCO Spotfire® Platform</th>
<th>TIBCO Spotfire® for AWS Marketplace</th>
<th>TIBCO Spotfire® Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deployment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Installation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Operation</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

This document (including, without limitation, any product roadmap or statement of direction data) illustrates the planned testing, release and availability dates for TIBCO products and services. It is for informational purposes only and its contents are subject to change without notice. © Copyright 2000-2017 TIBCO Software Inc. All rights reserved. TIBCO Proprietary Information.
TIBCO Spotfire Platform

• Ready for (Hybrid) Cloud deployments
• Web based administration, analytics consumption and authoring
• Fault tolerance
• Support for scaling out/in as capacity needs change
• Resource partitioning
TIBCO Spotfire for AWS

• **Spotfire for AWS** provides technical teams and AWS customers powerful data visualization and dashboards for Amazon Redshift™, Amazon RDS™, and more via AWS Marketplace™.

• You have the power of best-in-class visualization in a pay-as-you-go pricing model and no up-front costs or long-term commitments. Pricing starts at less than $1 per hour, with no data limits.
TIBCO Spotfire Cloud

• **TIBCO Spotfire Cloud** is a SaaS offering that allows individuals and teams of analysts, business authors and data consumers to collaborate and perform business analytics.
  - **Cloud Analysts** have access to a powerful desktop client for authoring and advanced analytics as well as a web client for authoring and on-the-go collaboration.
  - **Cloud Business Authors** have access to our powerful web client for authoring and on-the-go collaboration.
  - **Cloud Consumers** can view any analyses shared with them by other authors via a powerful web client.

• **TIBCO Spotfire Cloud Enterprise** adds dedicated capacity, single sign on and corporate data access through VPN Tunneling.
DIGITAL SMARTER