



*Work Like Tomorrow.™*

# Kofax TotalAgility Sample Architecture Diagrams

January 2023  
Version 1.0



# Contents

Overview .....	3
3 Tier Architecture .....	4
Topology & Components .....	5
Minimal Deployment .....	6
AWS Deployment Example .....	7
High Availability – Basic .....	8
High Availability – Network Load Balancer / Windows Server Failover Clustering .....	9
High Availability / Disaster Recovery - Windows Server Failover Clustering .....	10
High Availability / Disaster Recovery – Manual Failover .....	11
High Availability / Scaling .....	12
Azure Cloud Deployment .....	13
Azure/Cloud Integration Server .....	14
On Premise Multi-tenancy .....	15
Real Time Transformation .....	16
Scan Client .....	17
Transformation Server .....	18
Import Connector .....	19
Reporting & Search and Matching Server .....	20

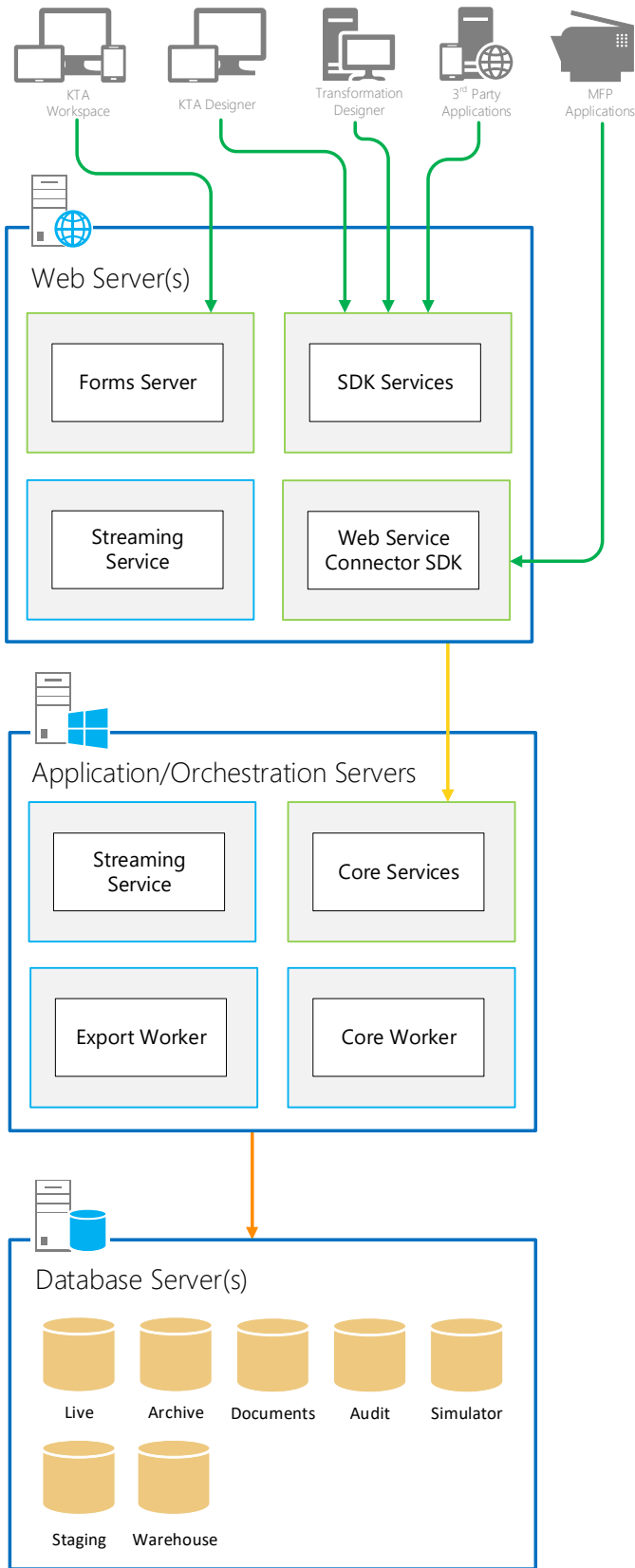
# Overview

This document provides a number of diagrams that can be used to help depict the communication and connectivity of the various components within a TotalAgility deployment. These are by no means meant to be exhaustive and complete solution architecture diagrams to be used for implementation. They are to help illustrate to a more technical audience some of the data flow and ports that the components use to communicate.

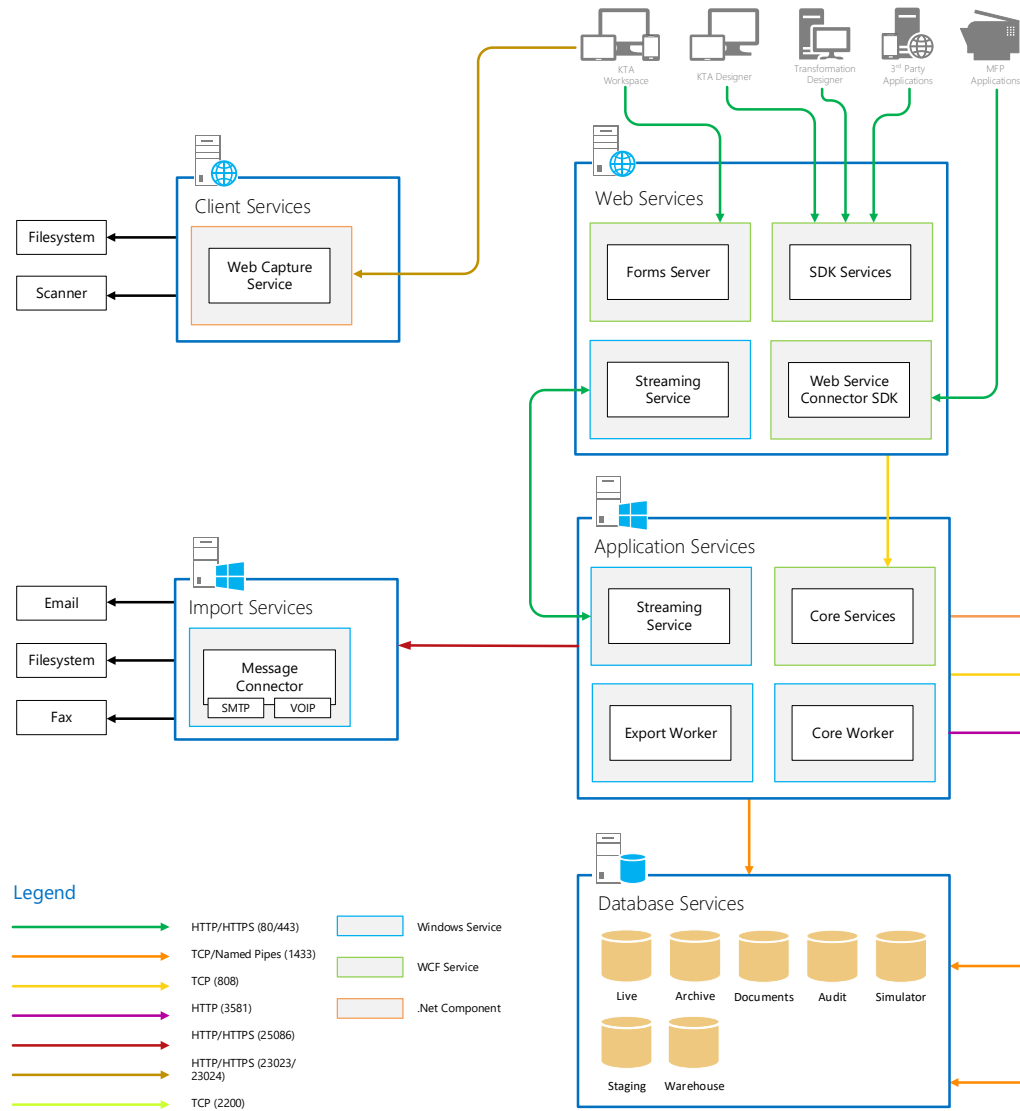
These diagrams should not be shared with customers as-is by Sales, please work with your Sales Engineer / Solution Consultant to establish what is relevant for your customer.

This set of diagrams is primarily focused on deployment to customers infrastructure, be that in the cloud or on premise and many of these diagrams are not applicable/relevant for customers that are looking to consume TotalAgility as a service (a.k.a. TotalAgility Cloud).

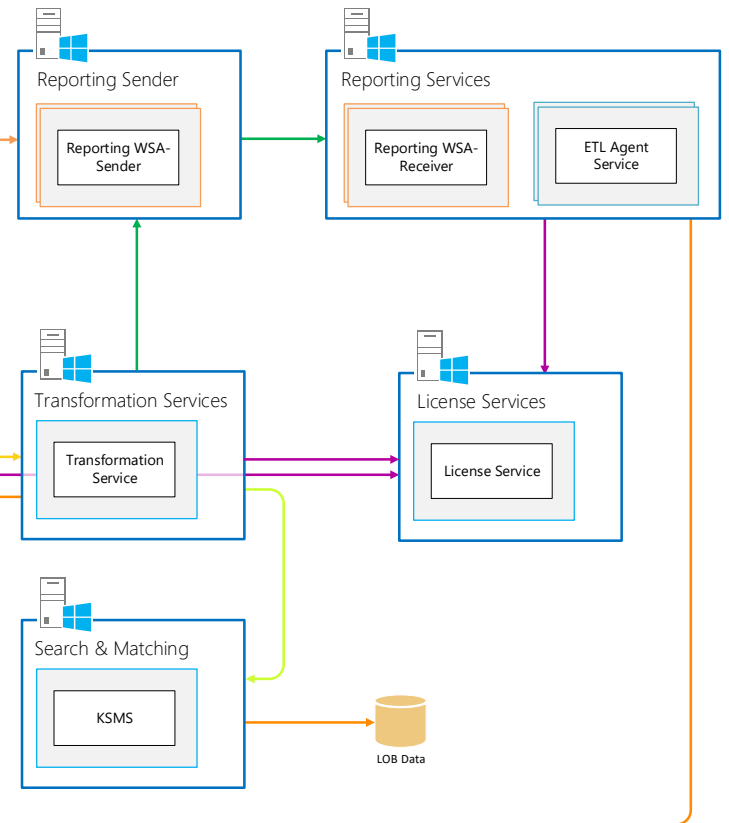
# 3 Tier Architecture



# Topology & Components

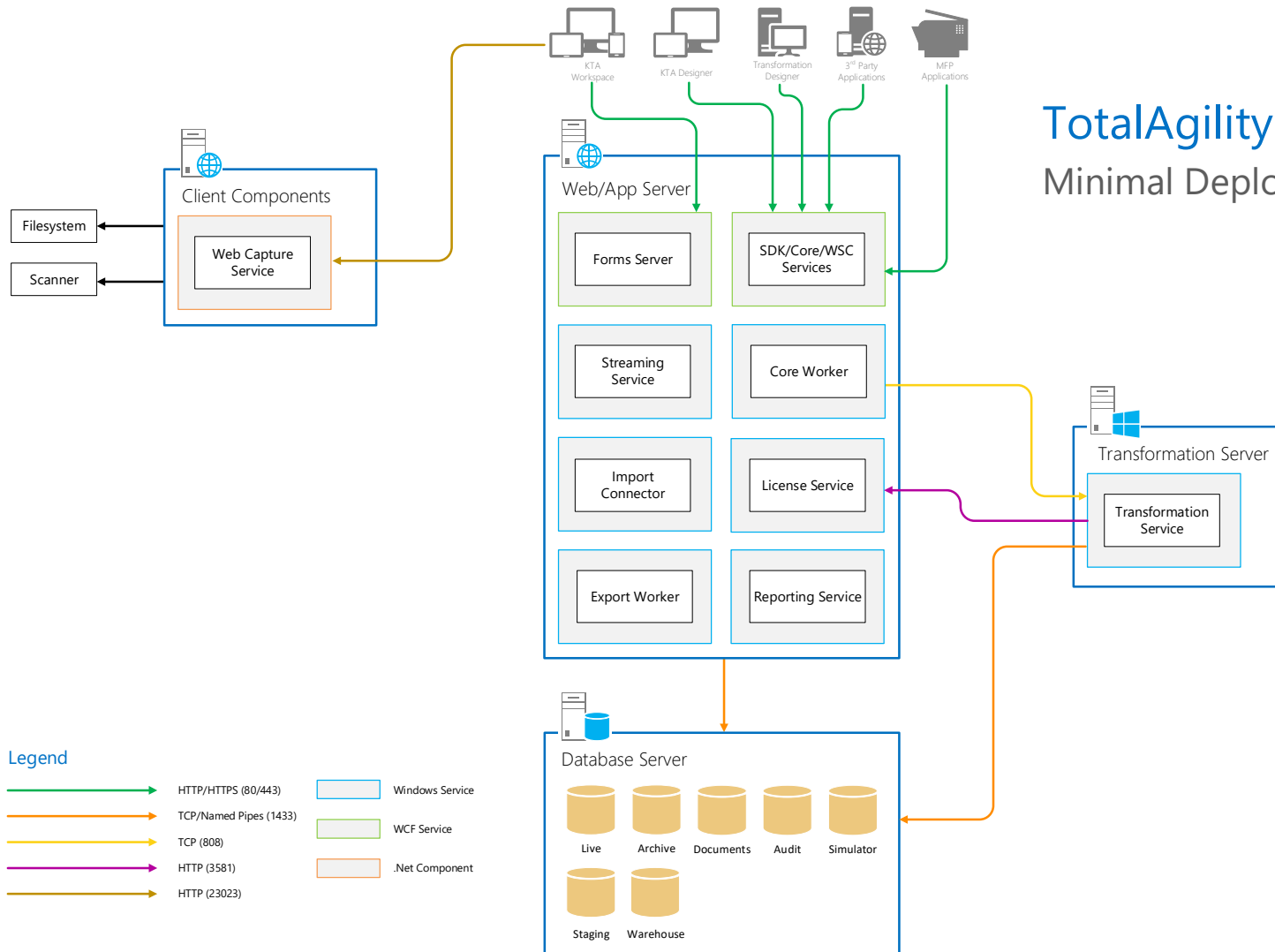


# TotalAgility 7 Architecture Components, Ports & Protocols

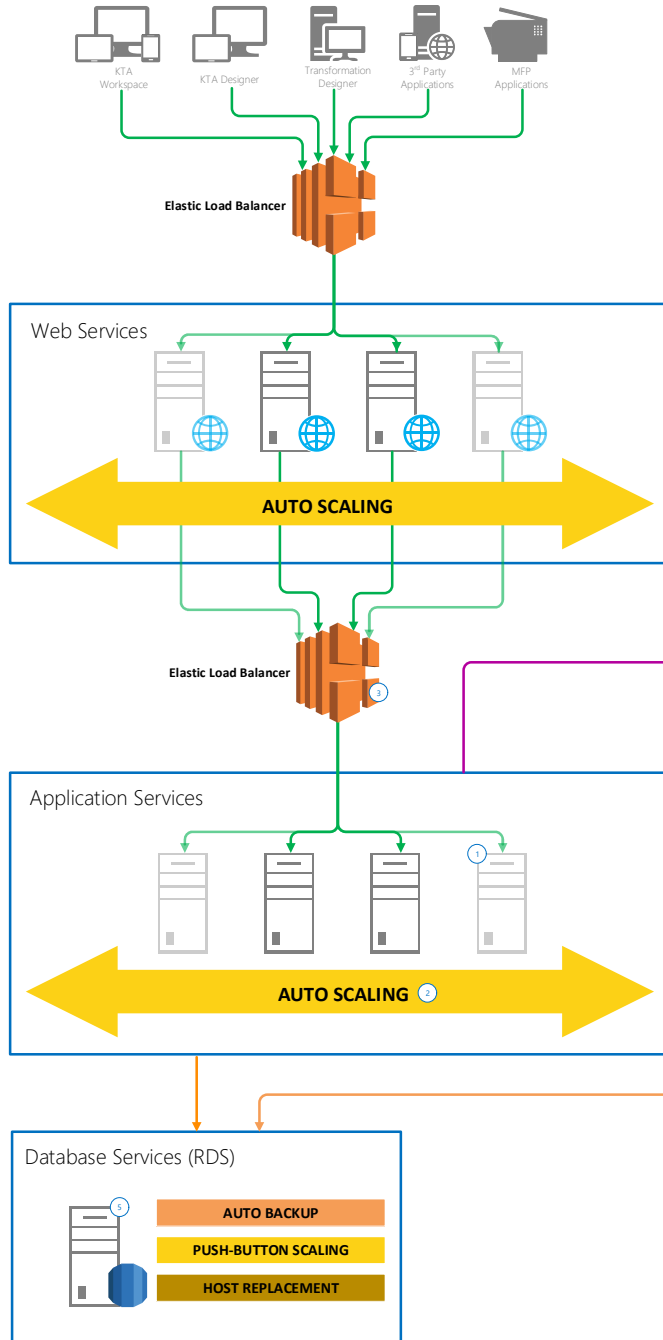


# Minimal Deployment

## TotalAgility 7 Components Minimal Deployment



# AWS Deployment Example



## TotalAgility 7

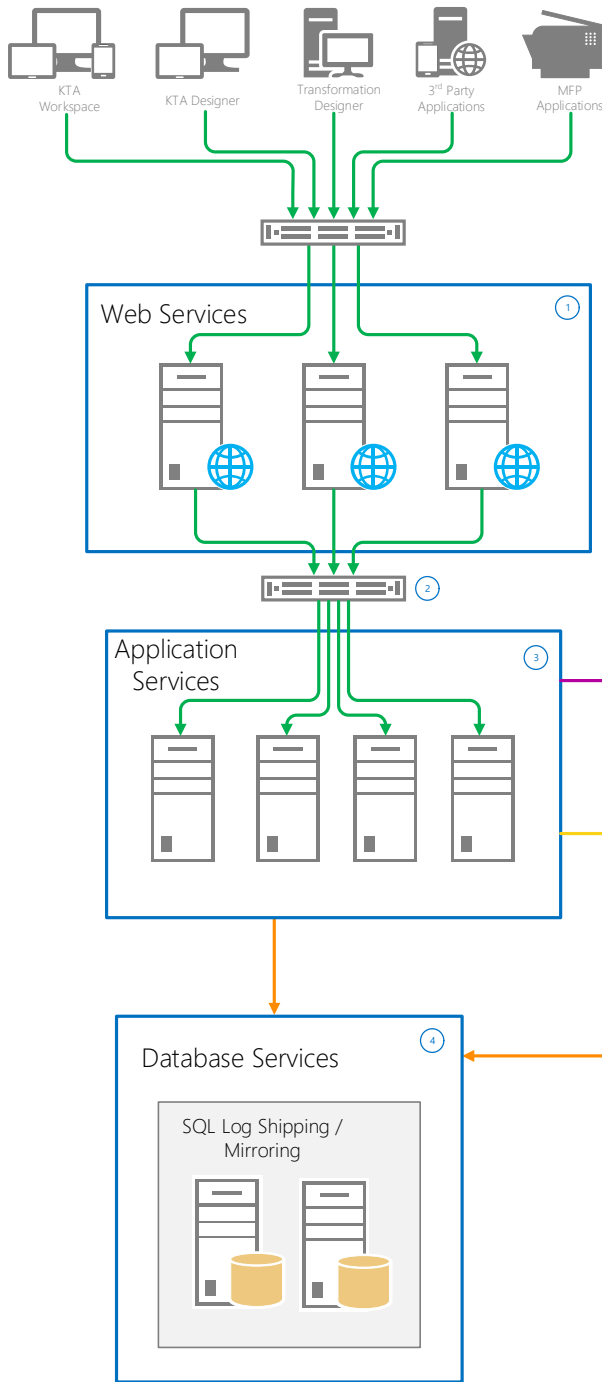
### AWS Deployment Example

- 1 Scripting is used to provision (or hydrate) new server components. For KTA, this involves running the KTA installer in silent mode, with options in the required XML file format. This can be done in order to provision new versions or patches of the product, or to add new instances for auto scaling.
- 2 Scaling is achieved through automatic triggering of script execution. When the utilization of a component stays above a configurable threshold for a configurable time. The script hydrates the required component by provisioning the underlying system and running the installer.
- 3 Elastic Load Balancing is used in front of the web and app layers to dynamically adjust load balancing requirements for the correct number of system components.
- 4 Disk Storage is persisted for the License Server, even when that server is re-provisioned. This allows license usage statistics to be preserved.
- 5 Amazon's RDS service for SQL Server takes care of provisioning, backups, software patching, monitoring, and hardware scaling.

#### Legend

- HTTP/HTTPS (80/443)
- TCP/Named Pipes (1433)
- TCP (808)
- HTTP (3581)

# High Availability – Basic







# TotalAgility 7

## High Availability – Basic

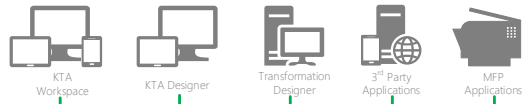
- ① Traffic to the Web Servers is managed by a hardware or software Load Balancer. There is no failover, so failure of any server will result in a reduction in overall processing capacity.
- ② Traffic between the web and application layers is managed using a Load Balancer. This can be hardware or software based.
- ③ Application servers are individually provisioned. There is no clustering or failover. Failure of any server will result in a reduction in overall processing capacity.
- ④ SQL Server features such as Log Shipping and Mirroring can be used to provide HA at the database level, either with or without automatic failover.
- ⑤ Primary and Backup License Servers are provisioned without load balancing or clustering. In the event that the primary License Server fails, KTA will automatically switch over to the backup License Server.

### Legend

-  HTTP/HTTPS (80/443)
-  TCP/Named Pipes (1433)
-  TCP (808)
-  HTTP (3581)

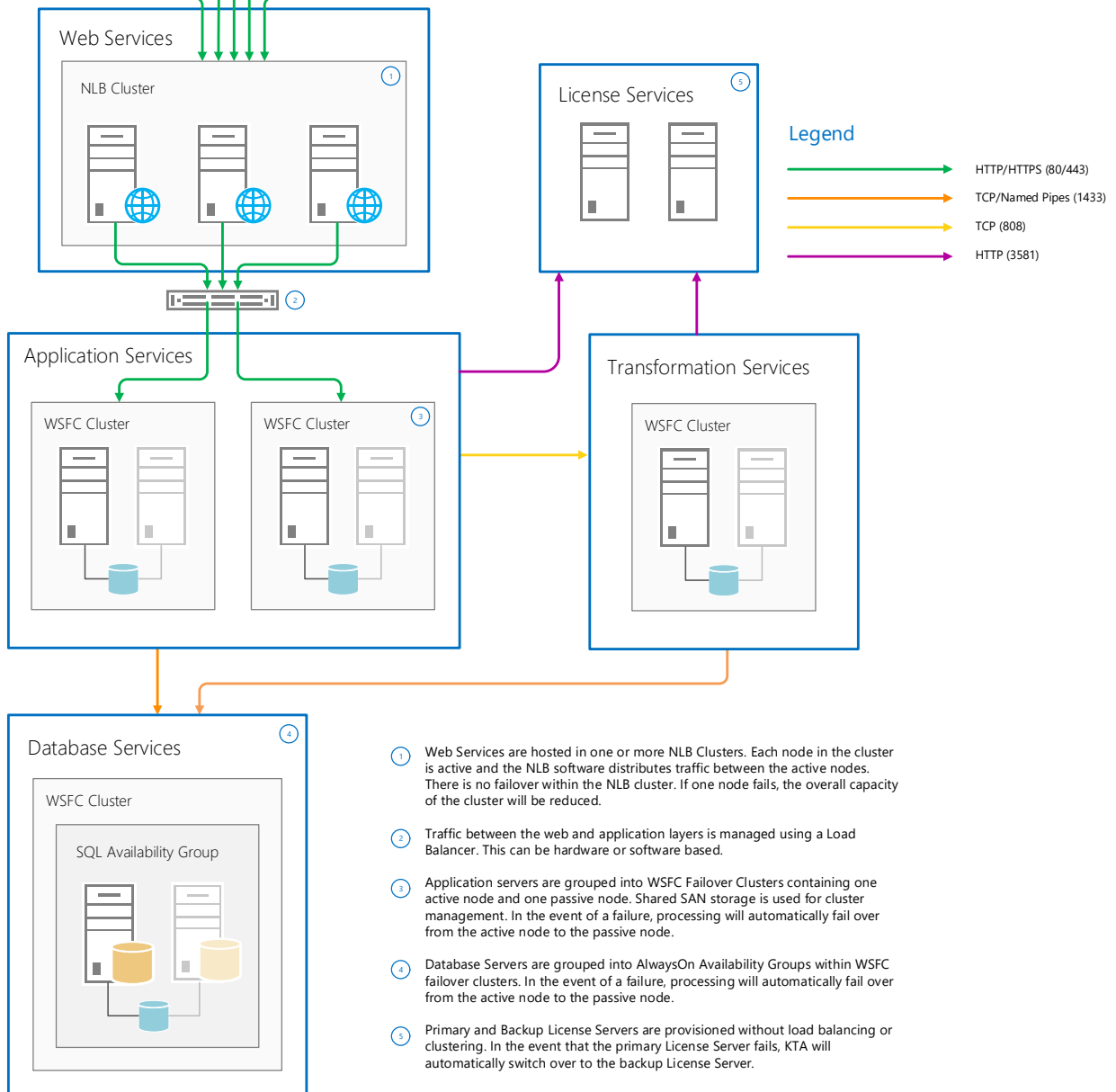


# High Availability – Network Load Balancer / Windows Server Failover Clustering

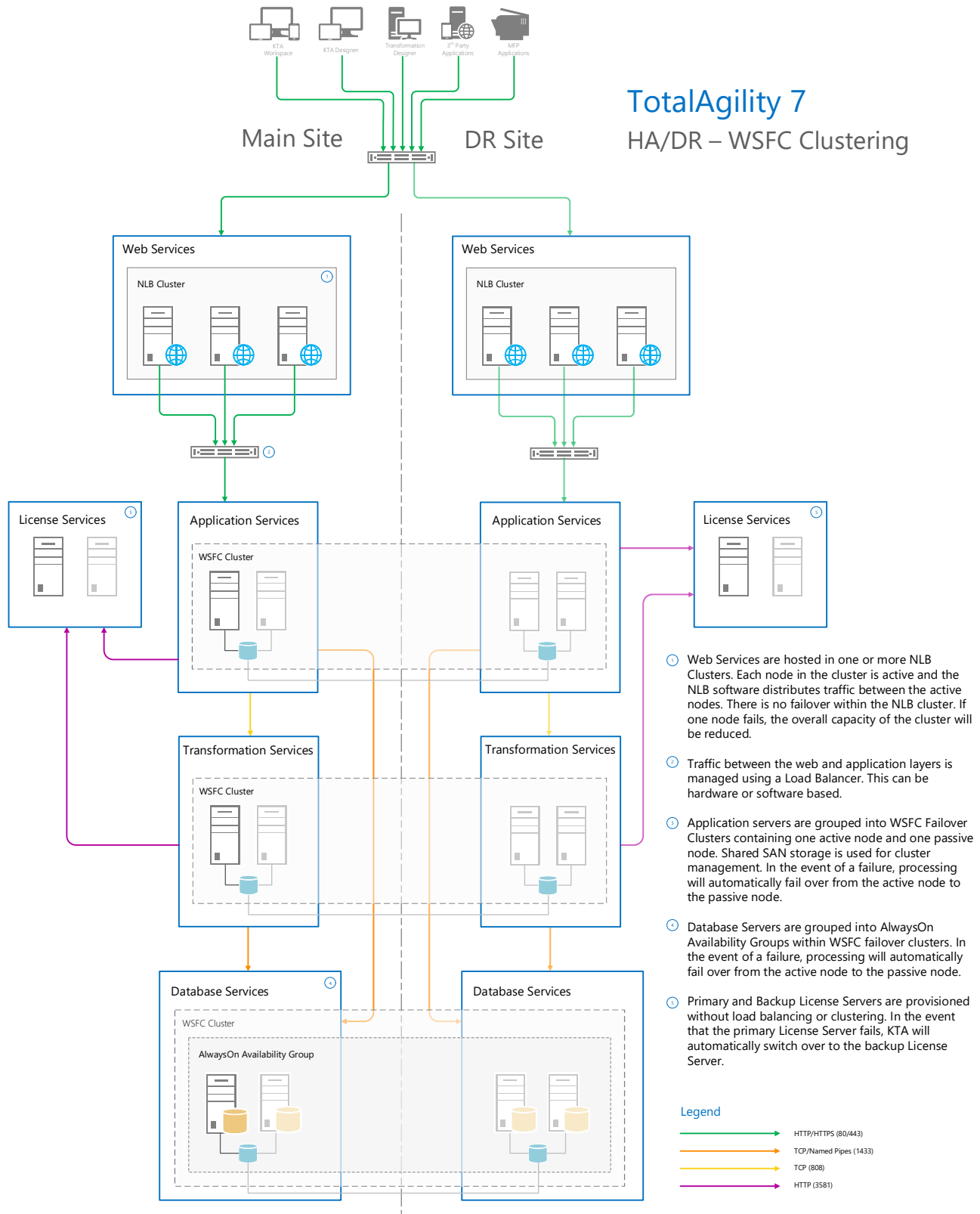


## TotalAgility 7

### High Availability – NLB/WSFC



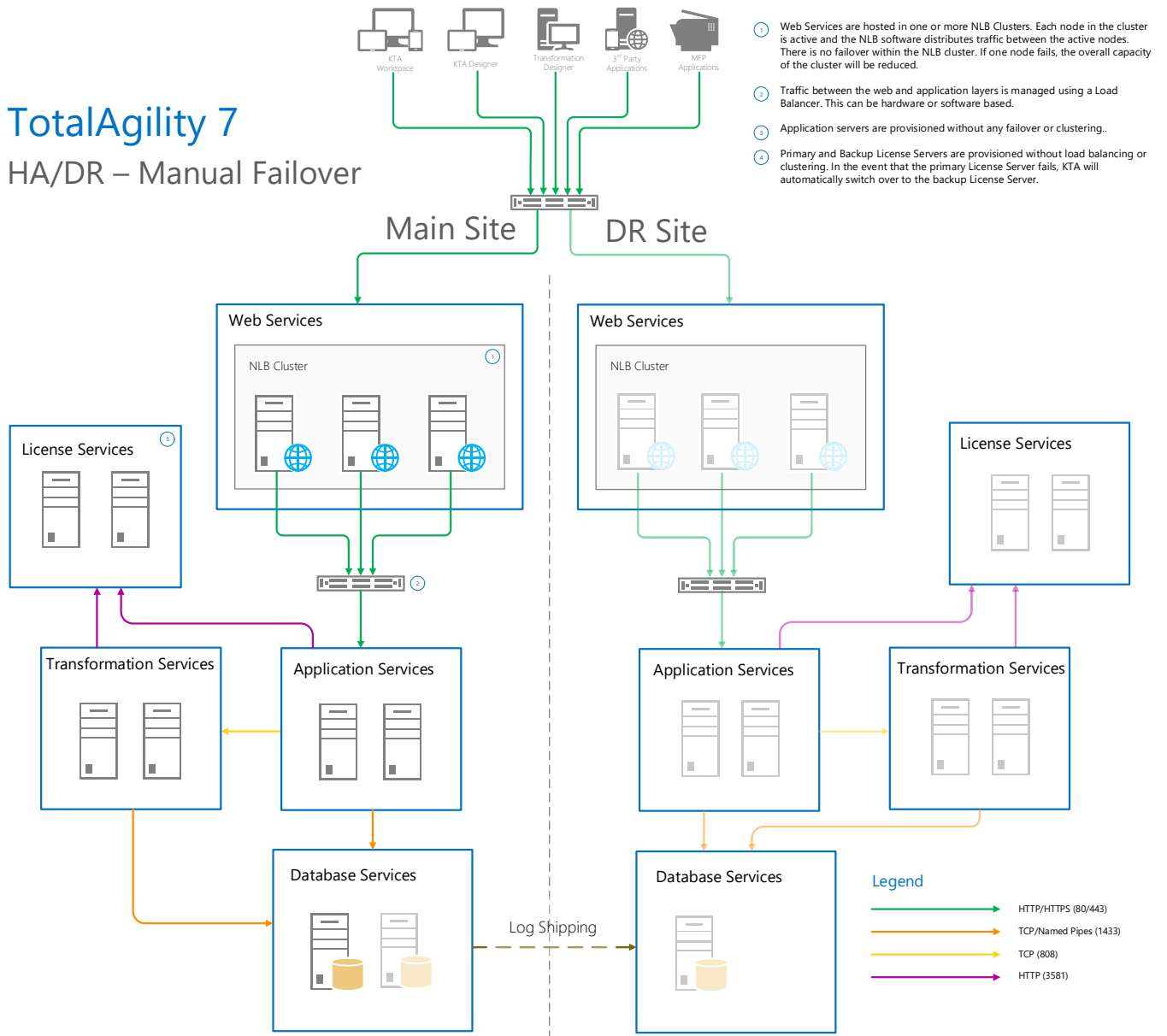
# High Availability / Disaster Recovery - Windows Server Failover Clustering



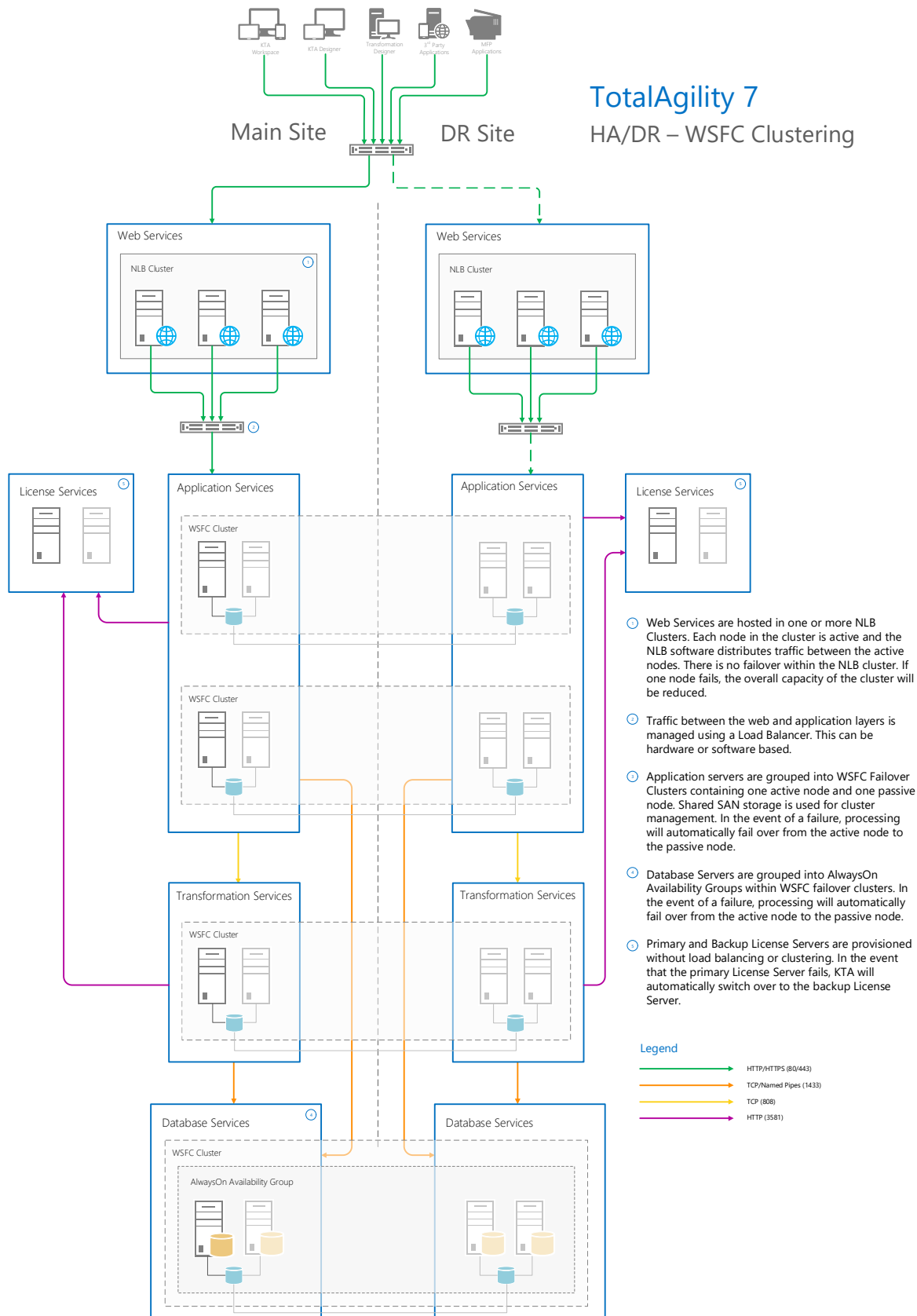
# High Availability / Disaster Recovery – Manual Failover

## TotalAgility 7

### HA/DR – Manual Failover



# High Availability / Scaling



TotalAgility 7  
HA/DR – WSFC Clustering

- Web Services are hosted in one or more NLB Clusters. Each node in the cluster is active and the NLB software distributes traffic between the active nodes. There is no failover within the NLB cluster. If one node fails, the overall capacity of the cluster will be reduced.
- Traffic between the web and application layers is managed using a Load Balancer. This can be hardware or software based.
- Application servers are grouped into WSFC Failover Clusters containing one active node and one passive node. Shared SAN storage is used for cluster management. In the event of a failure, processing will automatically fail over from the active node to the passive node.
- Database Servers are grouped into AlwaysOn Availability Groups within WSFC failover clusters. In the event of a failure, processing will automatically fail over from the active node to the passive node.
- Primary and Backup License Servers are provisioned without load balancing or clustering. In the event that the primary License Server fails, KTA will automatically switch over to the backup License Server.

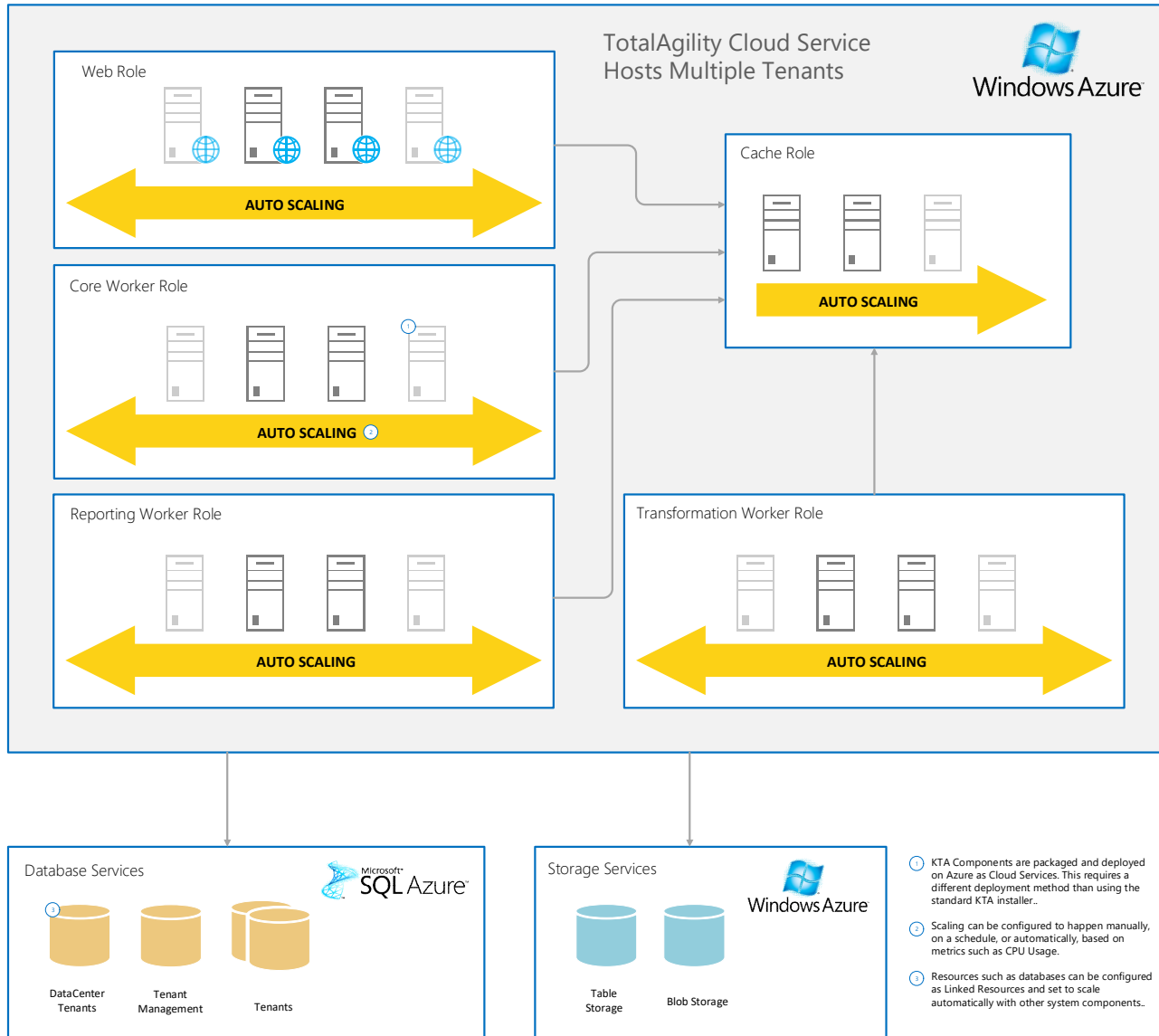
Legend

- Green arrow: HTTP/HTTPS (80/443)
- Orange arrow: TCP/Named Pipes (1433)
- Yellow arrow: TCP (808)
- Purple arrow: HTTP (3581)

# Azure Cloud Deployment

## TotalAgility 7

### Azure Cloud Deployment



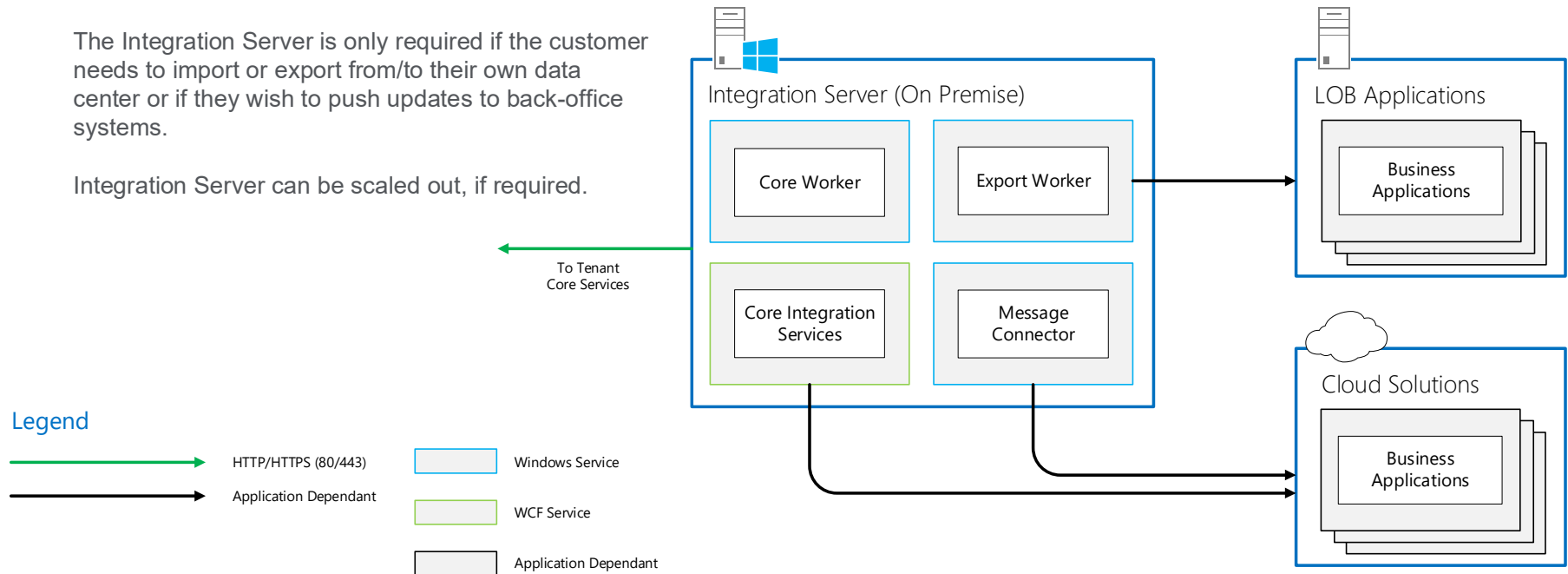
# Azure/Cloud Integration Server

## TotalAgility 7

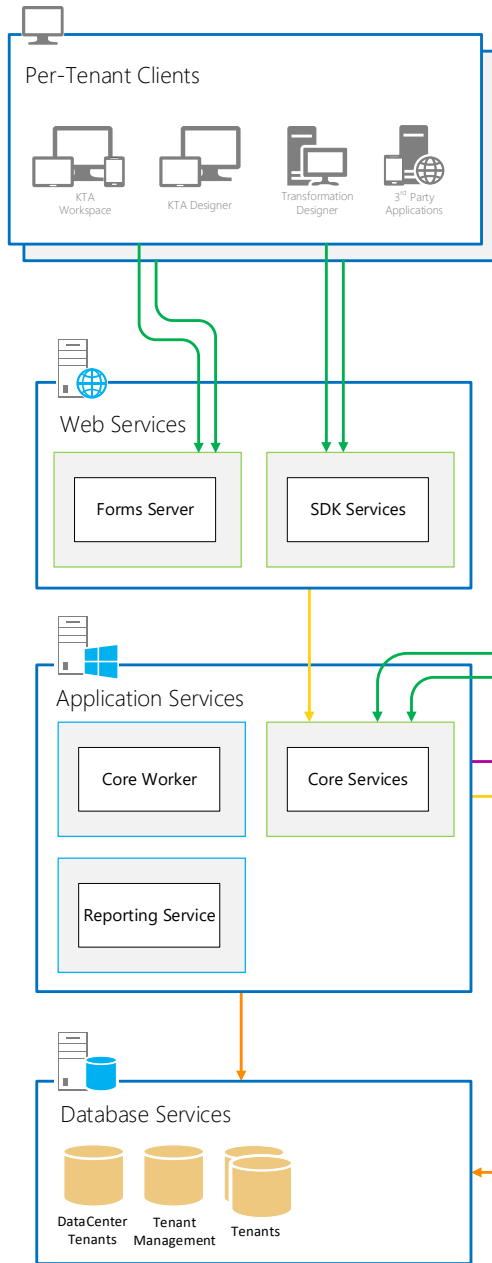
### Integration Server Deployment

The Integration Server is only required if the customer needs to import or export from/to their own data center or if they wish to push updates to back-office systems.

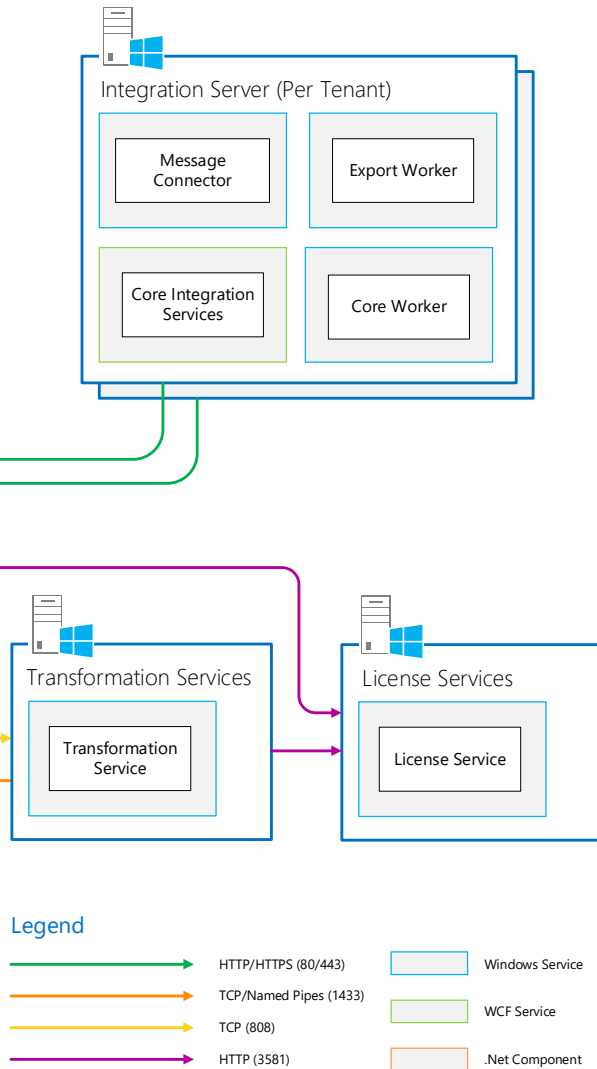
Integration Server can be scaled out, if required.



# On Premise Multi-tenancy

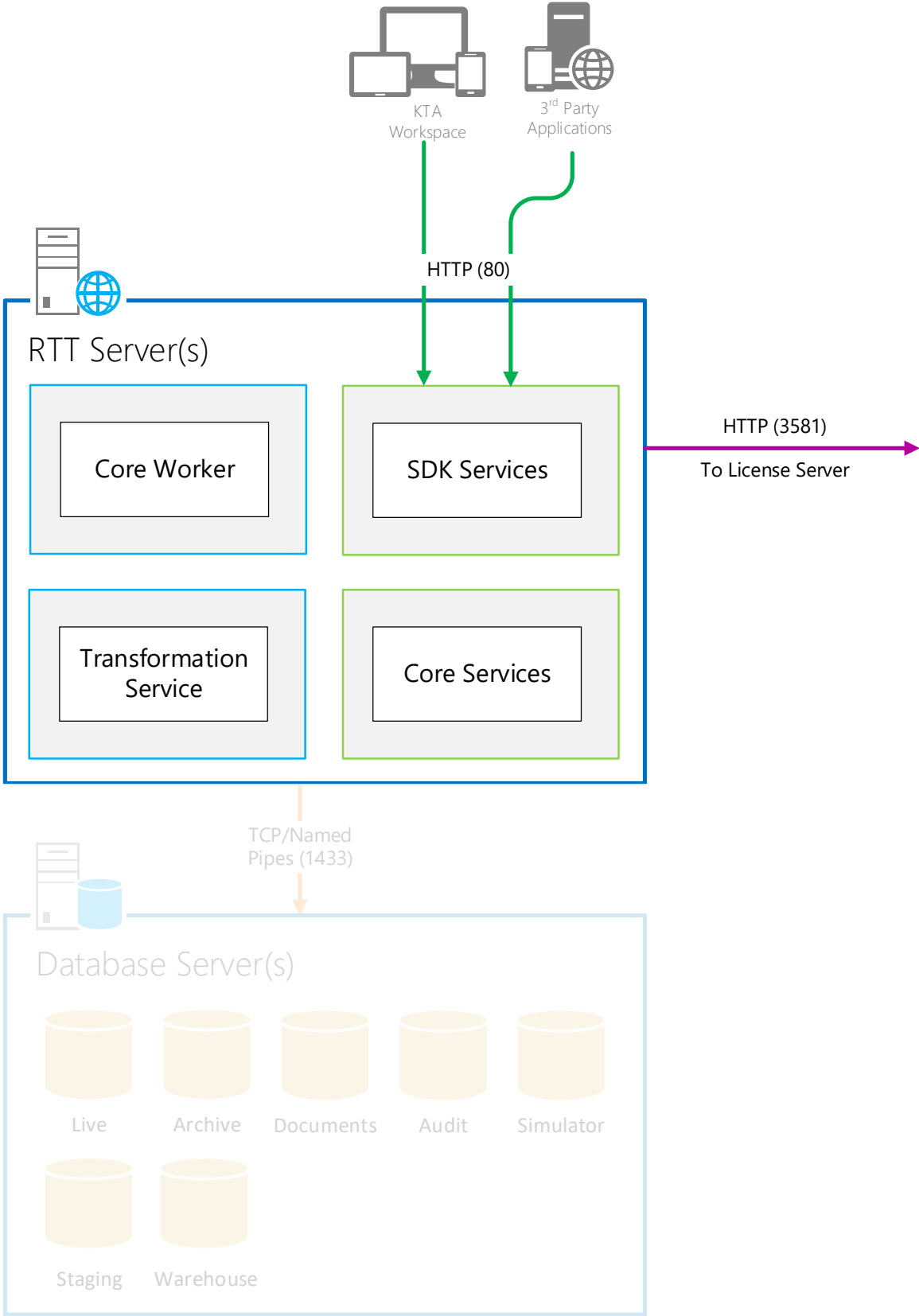


# TotalAgility 7 Architecture On Premise Multi-Tenancy



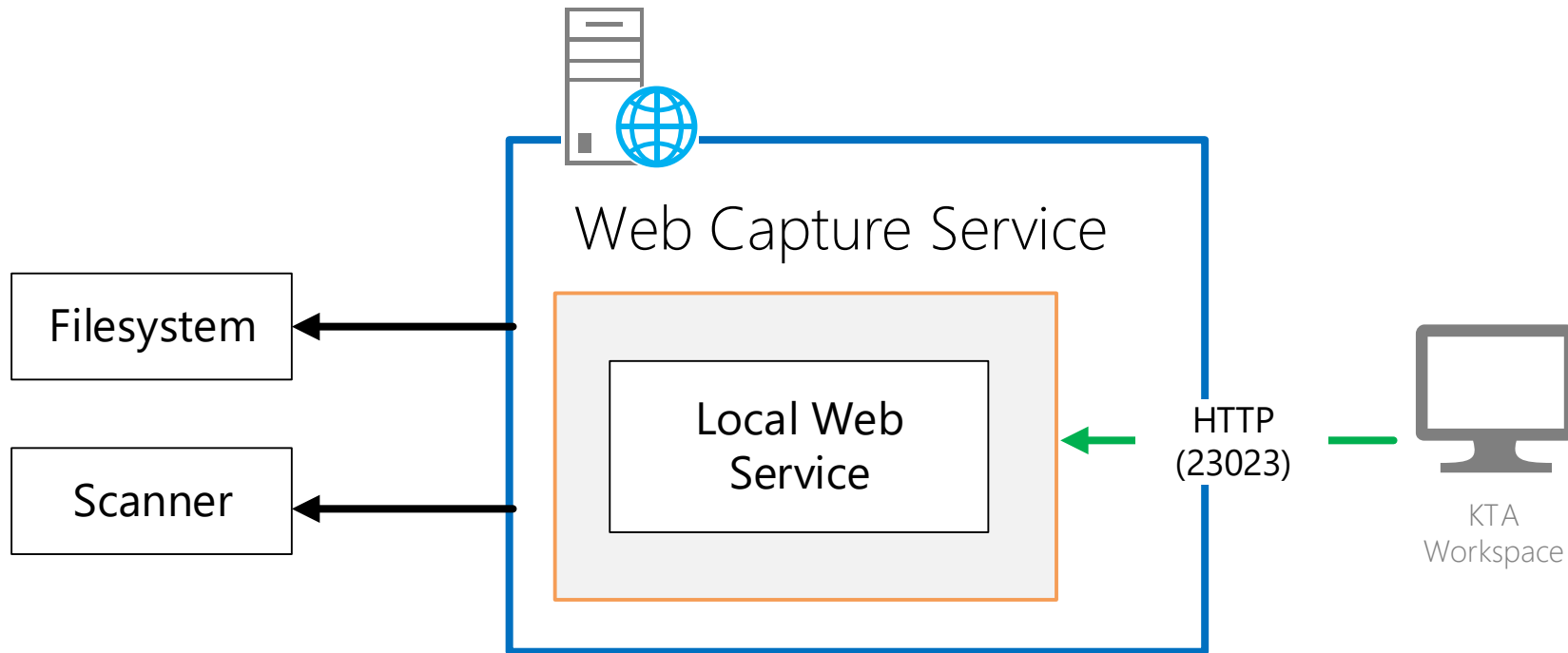
- Legend**
- Green arrow: HTTP/HTTPS (80/443)
  - Orange arrow: TCP/Named Pipes (1433)
  - Yellow arrow: TCP (808)
  - Purple arrow: HTTP (3581)
  - Light blue box: Windows Service
  - Light green box: WCF Service
  - Light orange box: .Net Component

# Real Time Transformation

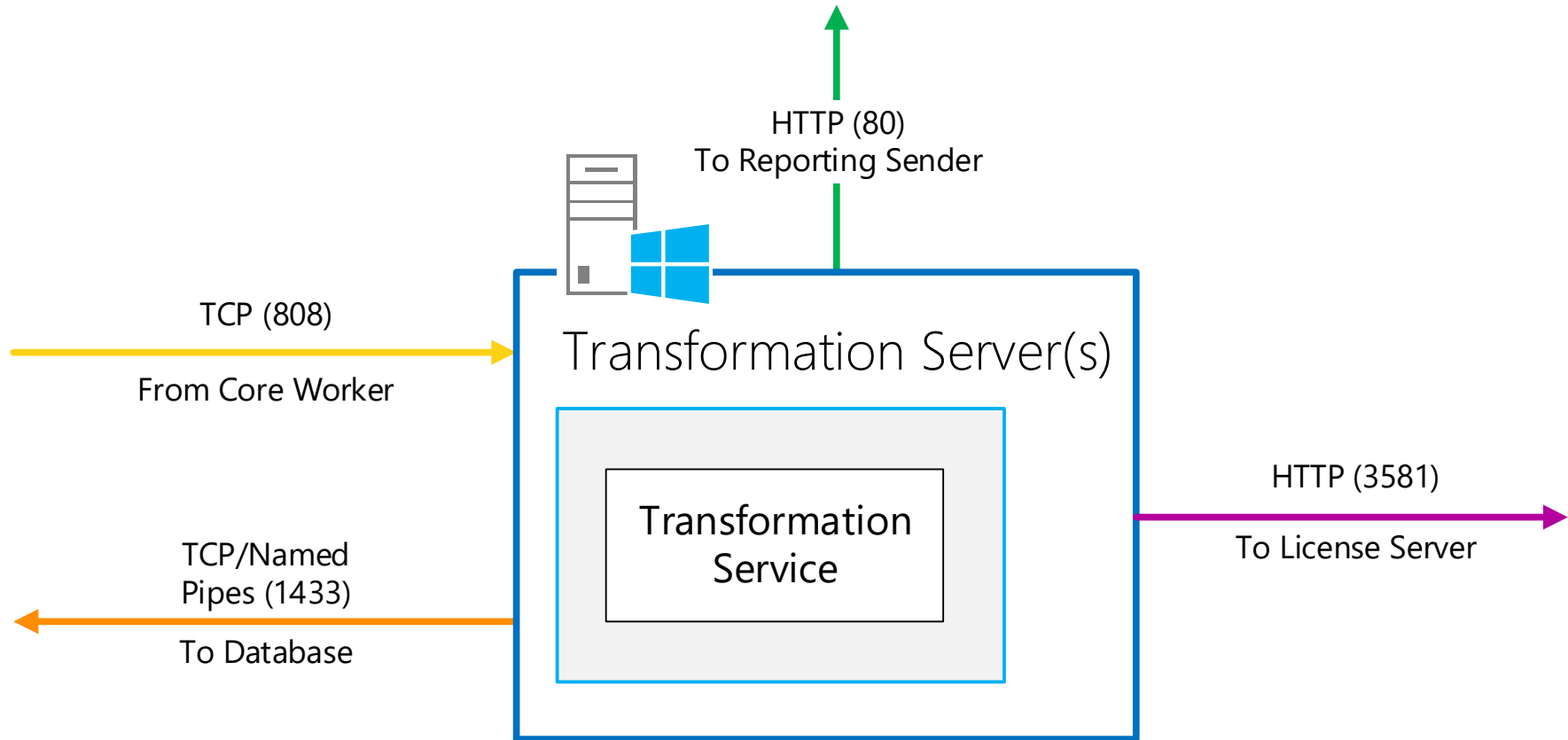




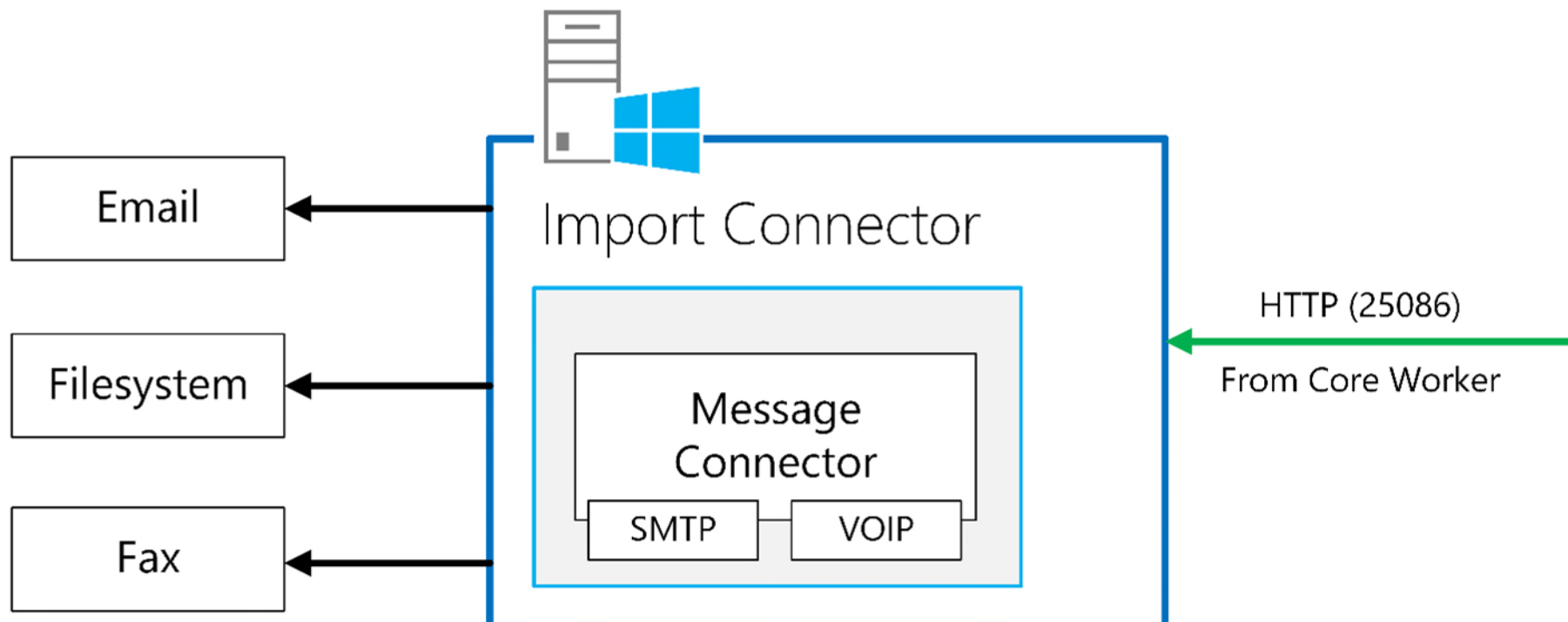
# Scan Client



# Transformation Server



# Import Connector



# Reporting & Search and Matching Server

