Deploy

Your step-by-step guide to successfully deploy an app with FileMaker Platform

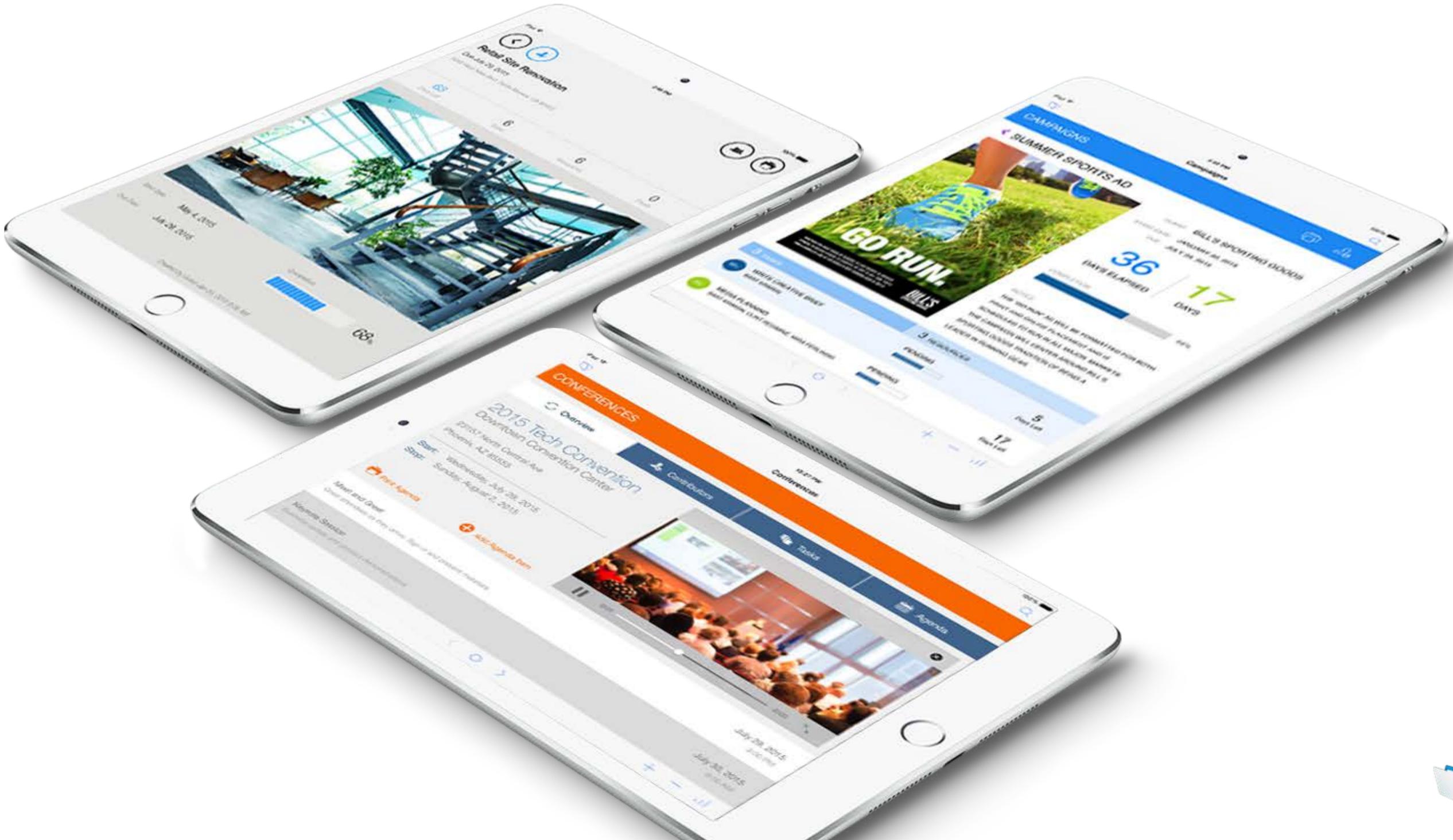**FileMaker**
An Apple Subsidiary
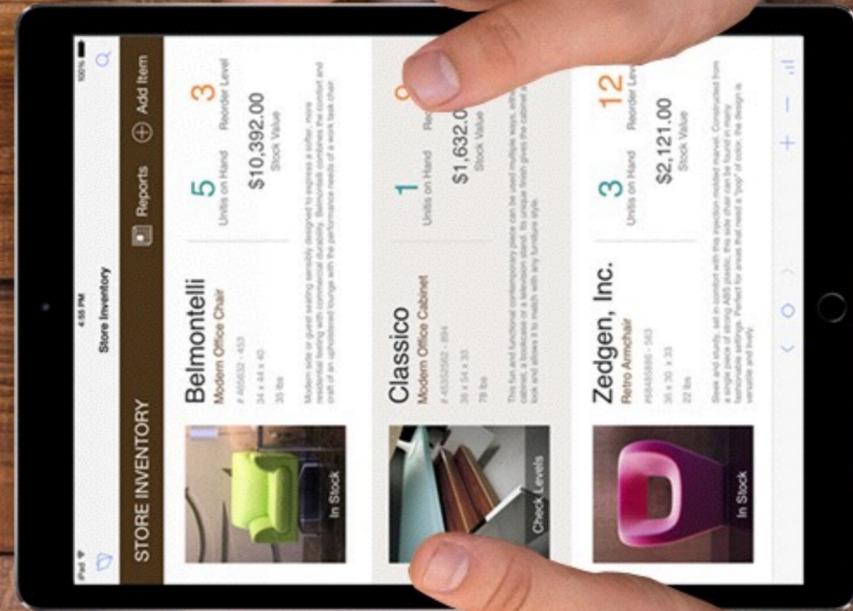
Share your custom app with your team!

Now that you've used the Plan Guide to define your custom app requirements, and used the Create Guide to build it, you're ready to consider hosting options. It's time to evaluate hardware and software requirements, and establish a schedule.

This guide walks you through the steps of deploying your custom app using the FileMaker Platform.
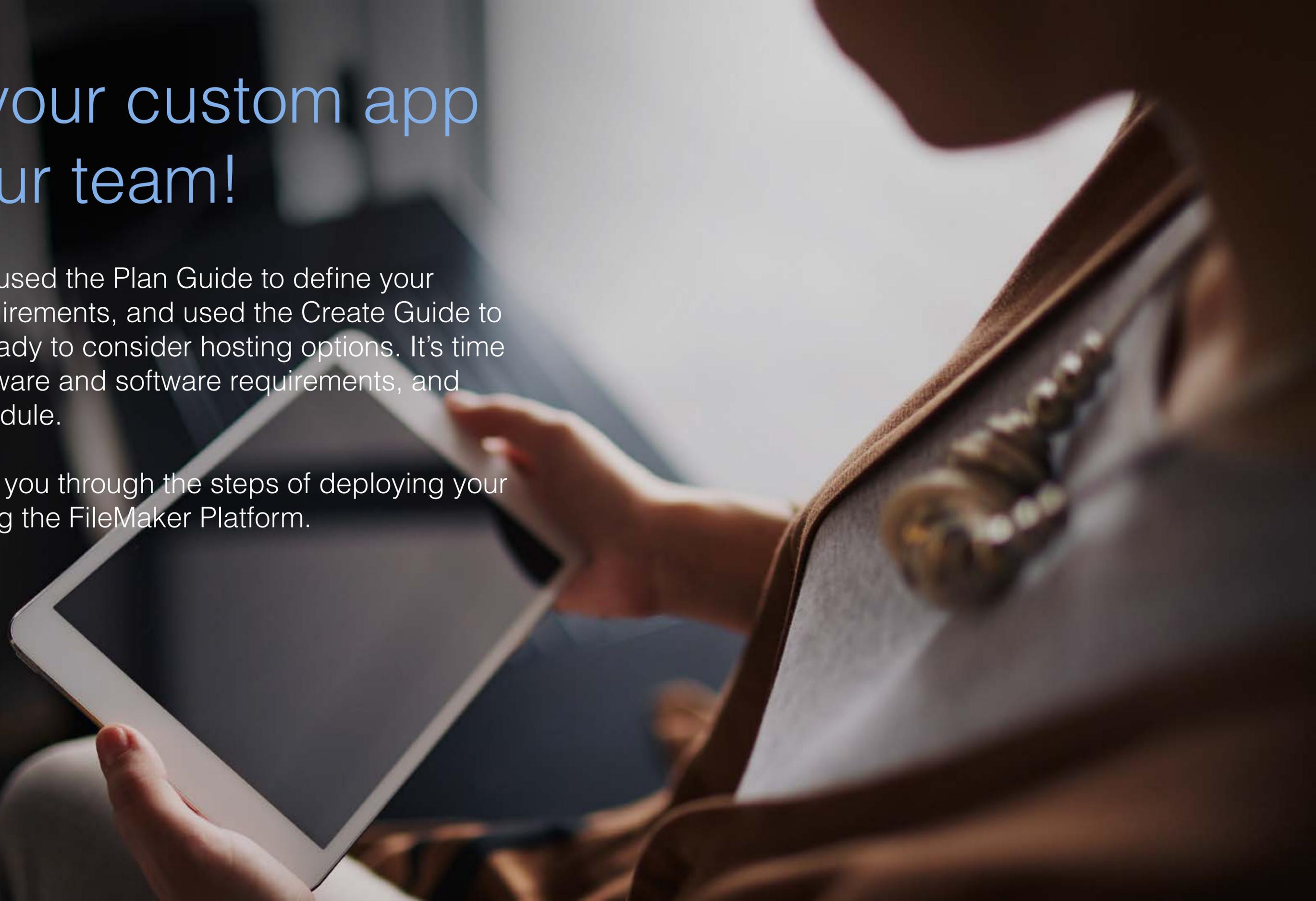
Build the perfect custom apps to connect the team to your business.

FileMaker
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Share your custom app using the FileMaker Platform!

This is the last part of a three-part guide which covers the steps for deploying a custom app using the FileMaker Platform.

Decide which products you'll need to successfully deploy your custom app with your team. Use this guide to help decide.

In this guide

FileMaker.
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The steps to building a custom app

Building a custom app starts with three principles.
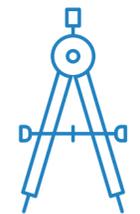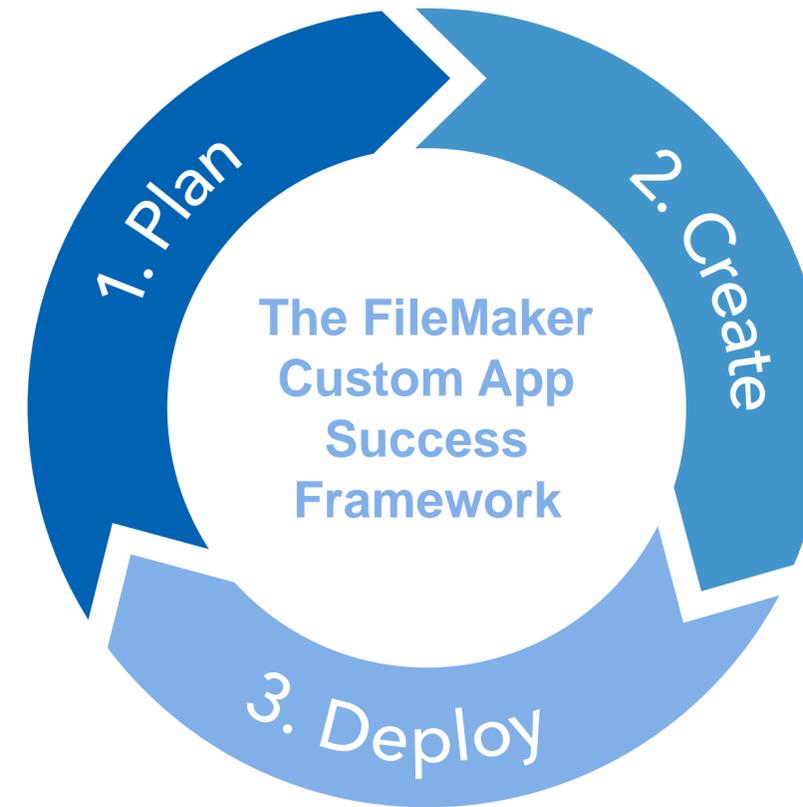
Plan

Create

Deploy

These principles, illustrated in three separate guides, lead you through the process of creating a custom app that transforms the way you do business.

Three principles help you build a custom app.

Explore what you can do with custom apps. Start with *Plan*.

The FileMaker Custom App Success Framework

1. Plan

2. Create

3. Deploy

Develop your custom app with *Create*, a step-by-step guide to working with the FileMaker Platform.
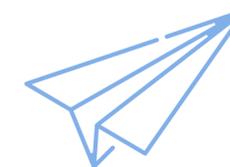
Put your custom app into action. Learn how to roll it out to users with *Deploy*.
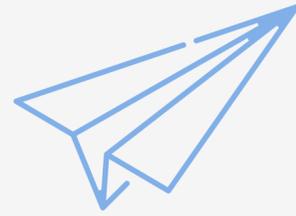
FileMaker.
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Use the FileMaker Platform

- Build a custom app
- **Use the FileMaker Platform**
- Host your app
- Consider data sources
- Decide what to buy
- Determine deployment strategy
- Determine backup strategy
- Plan for disaster recovery
- Considerations for system administrators
- Appendix A

3. Deploy

FileMaker
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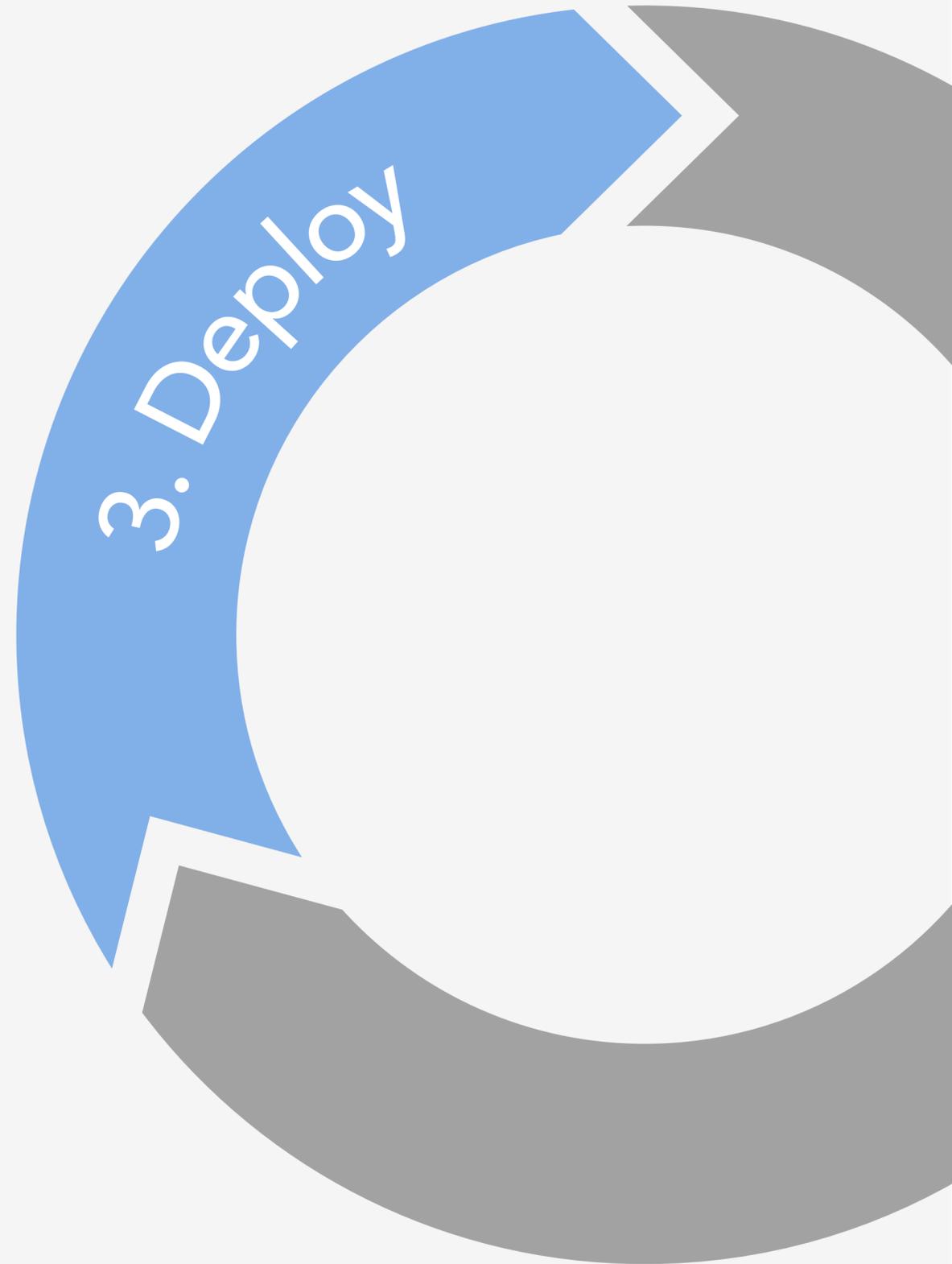
The FileMaker Platform: iPad, iPhone, Windows, Mac, and the web

FileMaker Server

FileMaker Go

FileMaker Pro
FileMaker Pro Advanced

FileMaker WebDirect

Host your app

- Build a custom app

- Use the FileMaker Platform

- **Host your app**

- Consider data sources
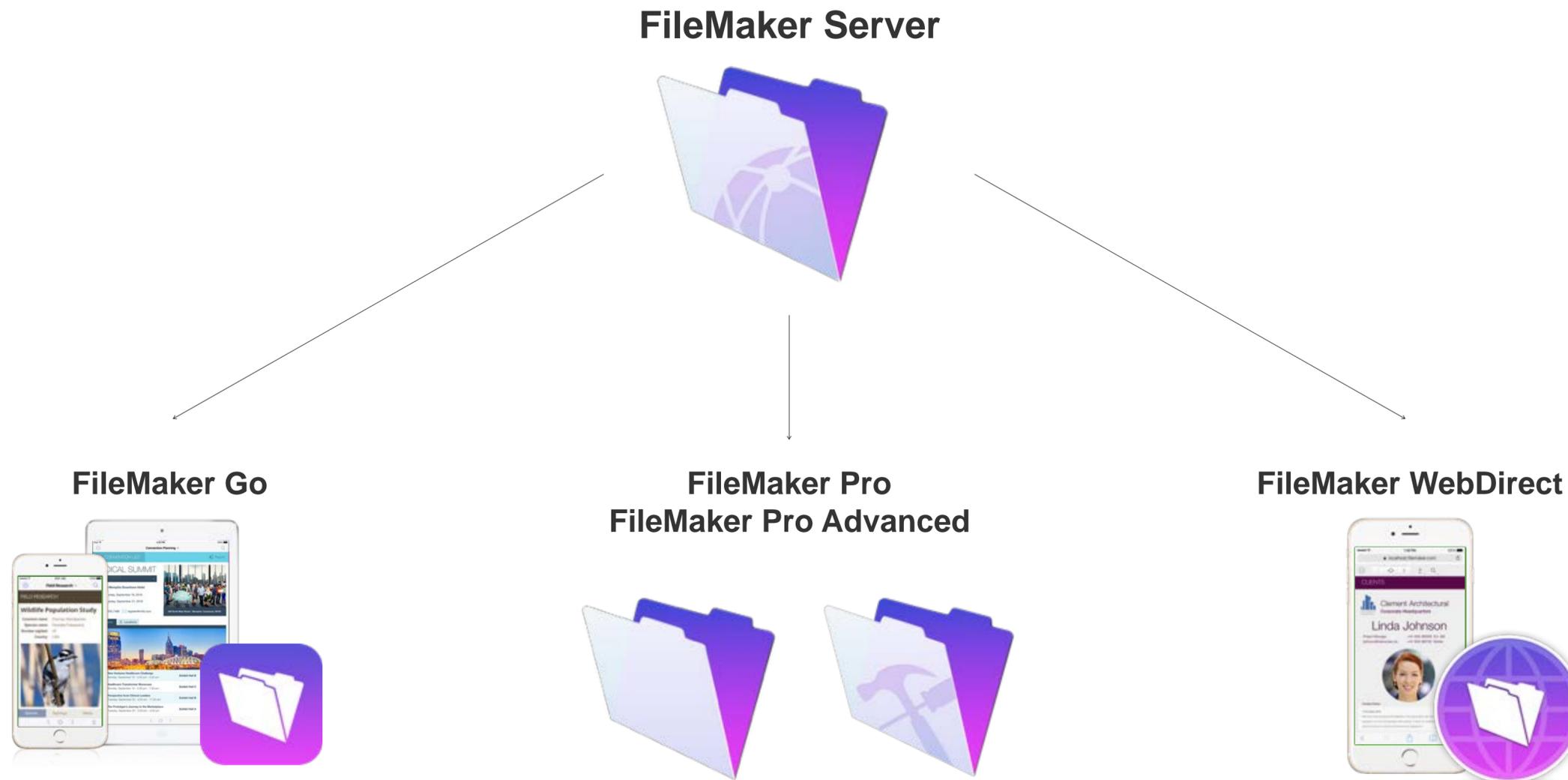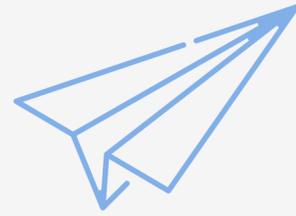
- Decide what to buy

- Determine deployment strategy

- Determine backup strategy

- Plan for disaster recovery

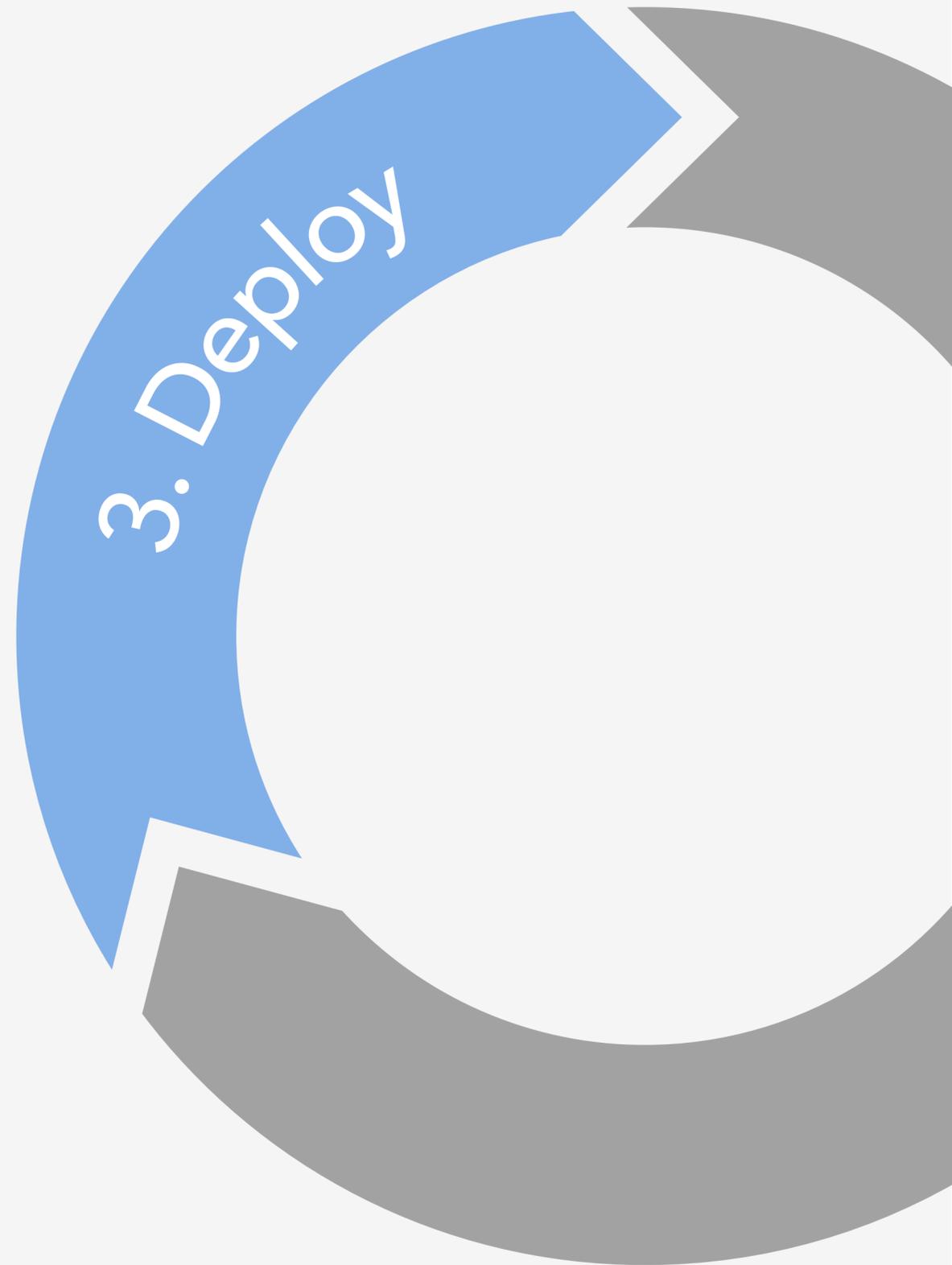- Considerations for system administrators

- Appendix A

3. Deploy

FileMaker.
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Deploying FileMaker Server for FileMaker Apps

FileMaker Server is fast and reliable server software for securely sharing and maintaining custom apps. It is a separate software application that runs on a dedicated machine, offers 24-hour access, automatic backups, and robust security features.

What is a hosted file?
Hosted files allow many people to see and share the same data — while providing efficiencies and sharing of tasks.

Hosted files allow users to securely share information among FileMaker Pro, FileMaker Go, and FileMaker WebDirect users.

FileMaker Server

**FileMaker Pro
FileMaker Pro Advanced**

FileMaker Go

FileMaker WebDirect

FileMaker 15 Getting Started Guide Chapter 5

Opening a Shared File in FileMaker Pro

FileMaker Server Technical Specifications

General Hardware Considerations for FileMaker Server

FileMaker
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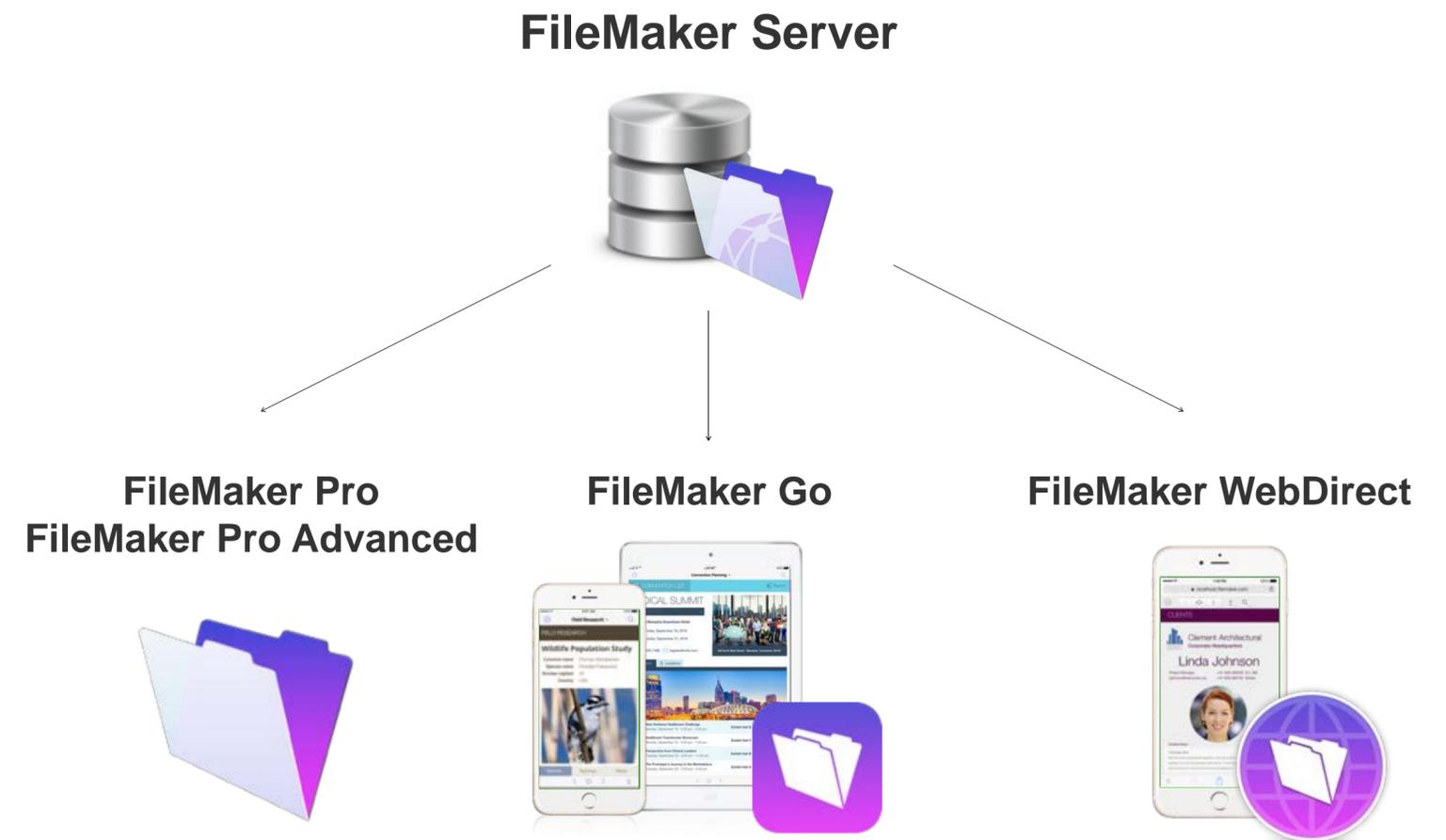
What are the benefits of using FileMaker Server?

With FileMaker Server you can:

- Monitor and administer custom apps remotely

- Automate backups for disaster recovery

- Schedule your scripts

- Secure your data via SSL encryption

- Provide robust scalability and network resilience

- Deploy interactive apps to the web

- Troubleshoot with statistics and logs

- Integrate with ODBC/JDBC
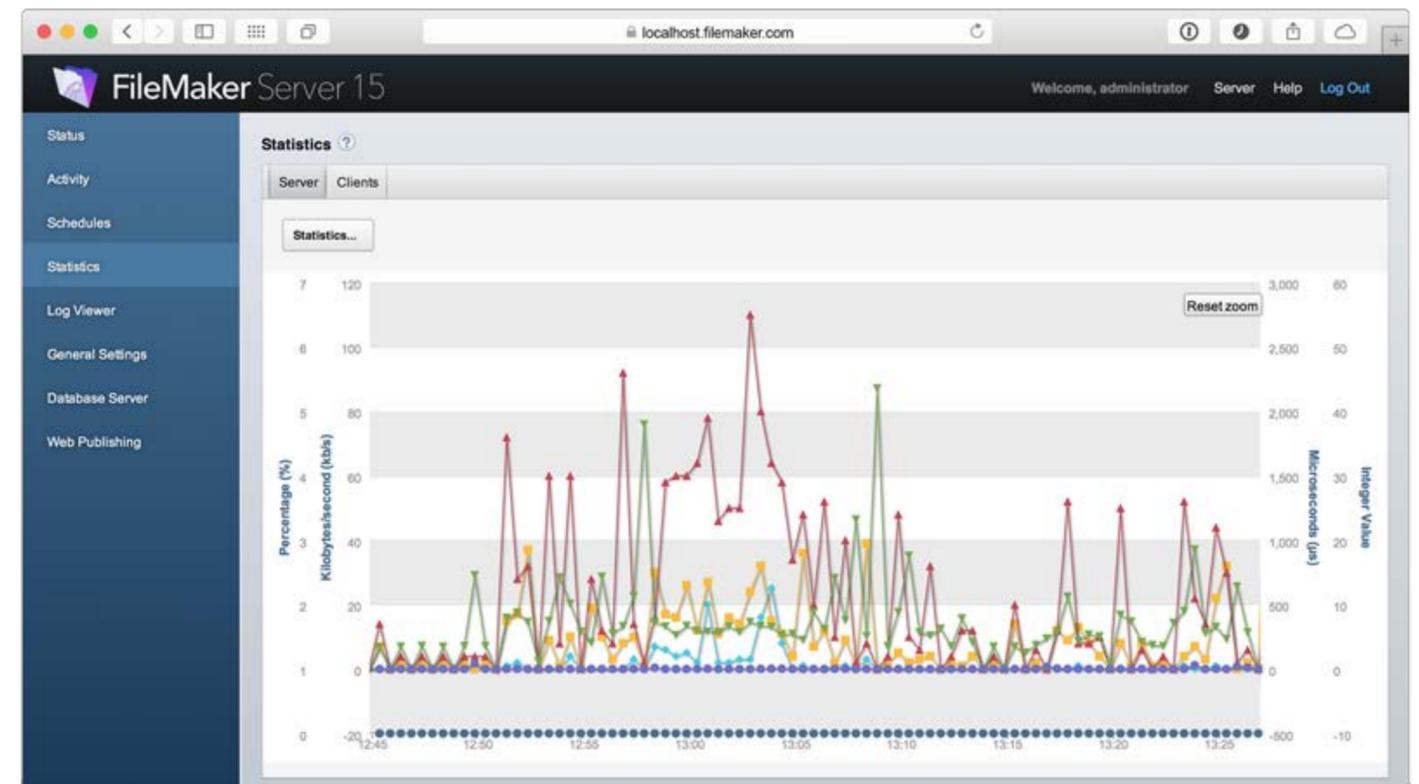
For best performance

- Run FileMaker Server on a dedicated machine so it can be reserved for use as a database server.

- Manage or limit other network traffic when FileMaker Server is hosting many clients or a large number of files.

- Evaluate and install the capacity needed for your apps, and for other processes running in parallel with FileMaker Server.

- Ensure your system's upload and download speeds are adequate for your needs.

See Appendix A for more information on the maximum number of connections tested.

Consider third-party hosting

If you do not have the capacity to host your apps, consider partnering with a third-party hosting provider. By hiring a certified FileMaker consultant you may be able to:

- Save time and money

- Build and deploy your apps faster

- Get the right expertise for your unique needs

Find a Consultant
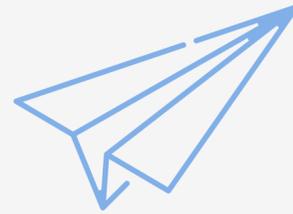
Consider data sources

- Build a custom app

- Use the FileMaker Platform

- Host your app

- **Consider data sources**

- Decide what to buy

- Determine deployment strategy

- Determine backup strategy

- Plan for disaster recovery

- Considerations for system administrators

- Appendix A

3. Deploy

FileMaker
An Apple Subsidiary
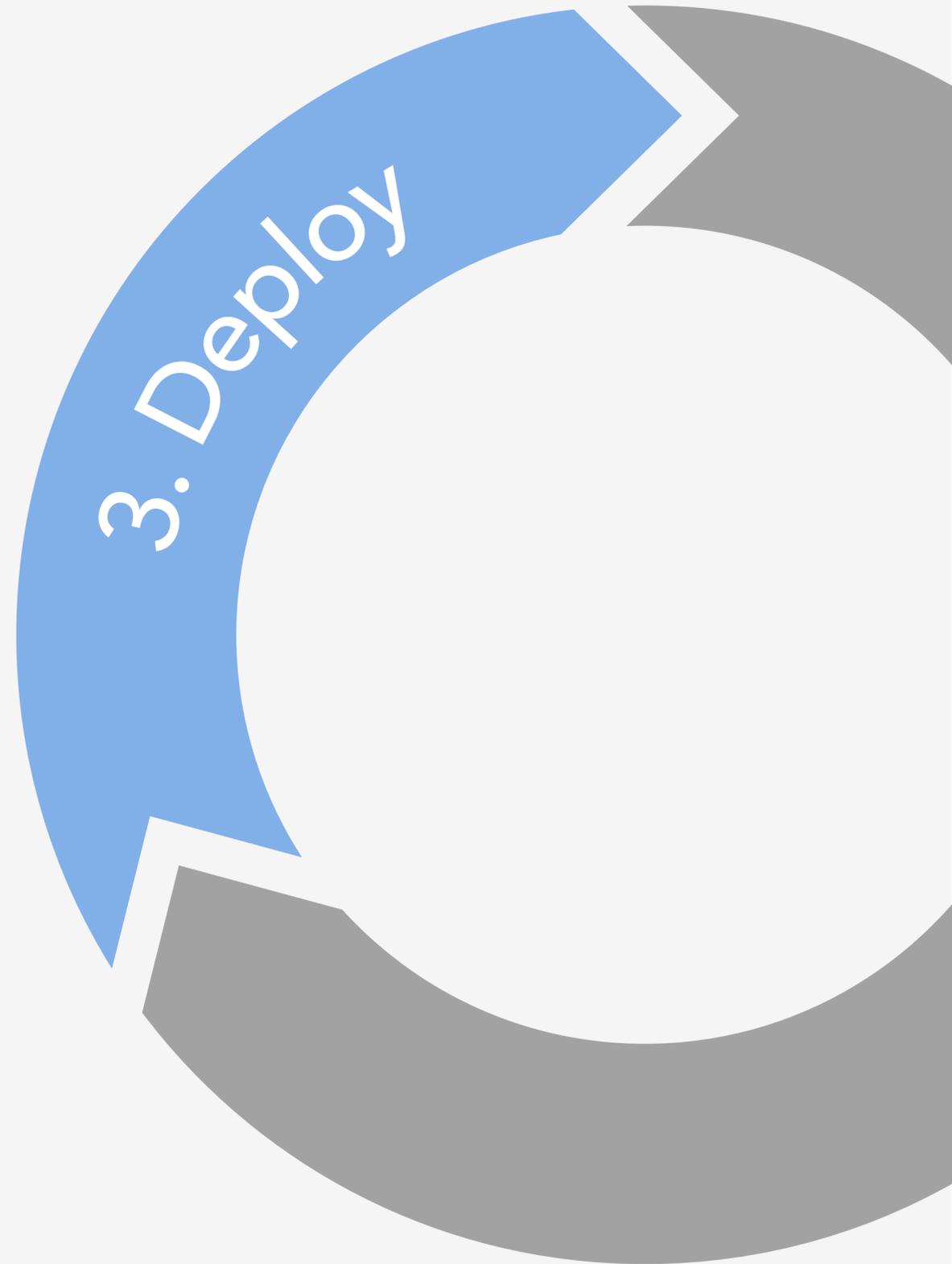
Consider data sources

Identify data sources
Determine how you or your users will access data sources. The data import process supports a variety of file formats such as CSV, Excel, XML, etc., while real time data integration supports external data sources.

Review system requirements
- Verify that your users are on a supported operating system

- Consult the FileMaker Server technical specifications and system requirements

Database
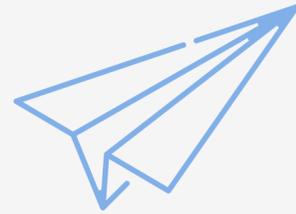
X CSV

MySQL

Importing Data into a
New FileMaker Pro File

ODBC / JDBC
Integration Overview

FileMaker Server
Technical Specifications

General Hardware Considerations
for FileMaker Server

FileMaker
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Decide
what to buy

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- **Decide what to buy**

- Determine deployment strategy

- Determine backup strategy

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- Considerations for system
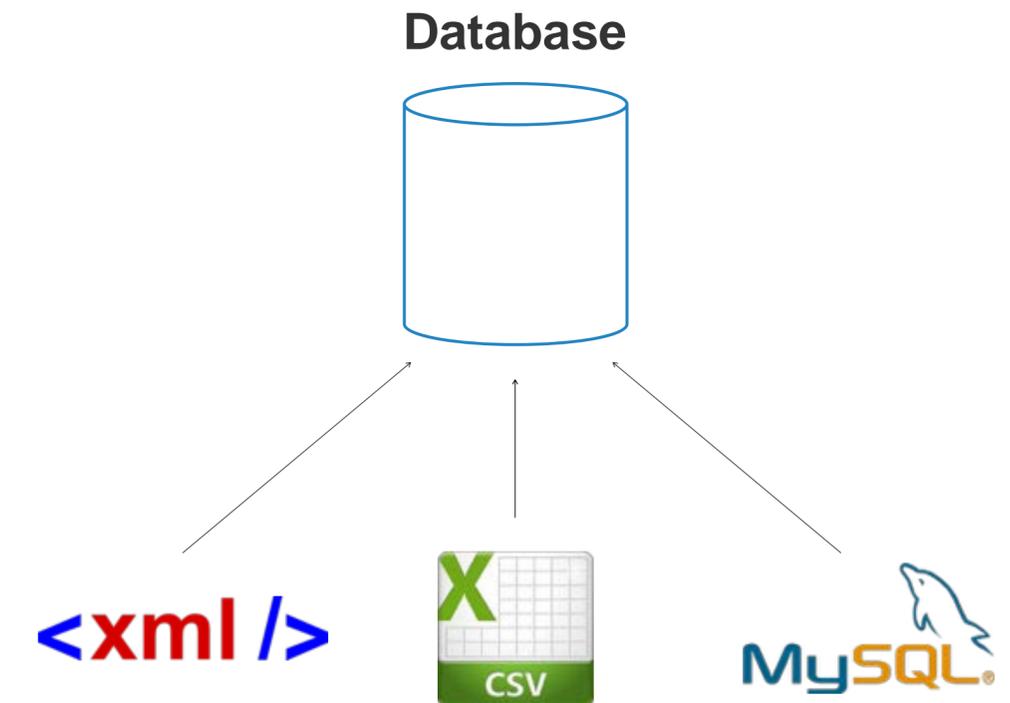 administrators

- Appendix A

3. Deploy

FileMaker.
An Apple Subsidiary
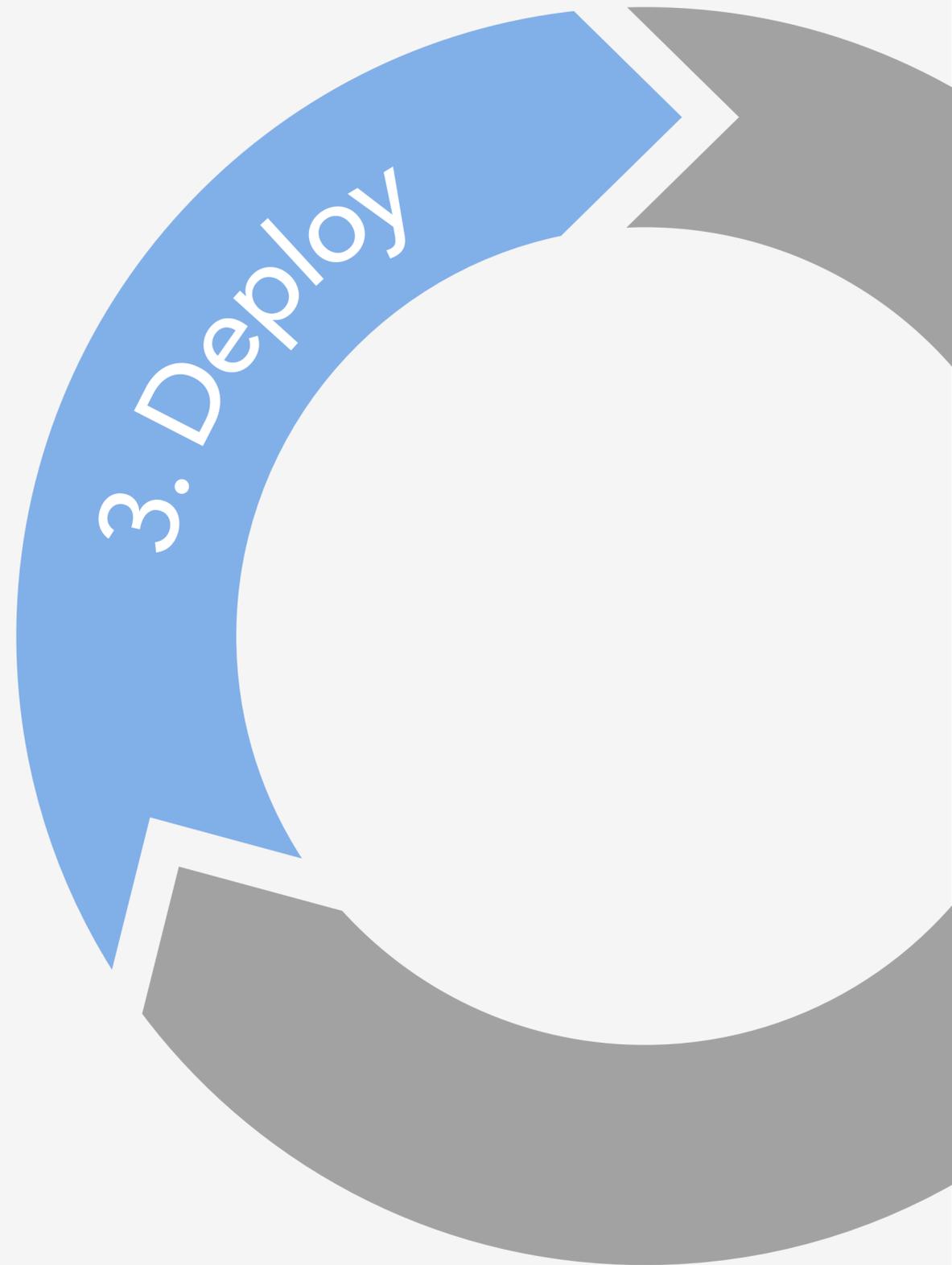
Decide what to buy

- Build custom apps using FileMaker Pro or FileMaker Pro Advanced on your Windows or Mac computer.

- Host apps on FileMaker Server and run apps on FileMaker Pro for Windows or Mac computers, FileMaker Go for iPad and iPhone, and FileMaker WebDirect for web browsers.

- It's easy to figure out what products you need. Simply determine how many people will use the FileMaker Platform. Each user can access FileMaker Pro (for User Connections), FileMaker Go, or FileMaker WebDirect — all connected to FileMaker Server* to securely share information in real time.

- Purchase FileMaker Server 15 for Teams along with the number of User Connections that correspond with the number of users you have. User Connections are sold in tiers of 5.

 * Each user may connect to FileMaker Server with only one client at a time.

FileMaker Server

FileMaker Go

**FileMaker Pro
FileMaker Pro Advanced**

FileMaker WebDirect

FileMaker Licensing

FileMaker An Apple Subsidiary

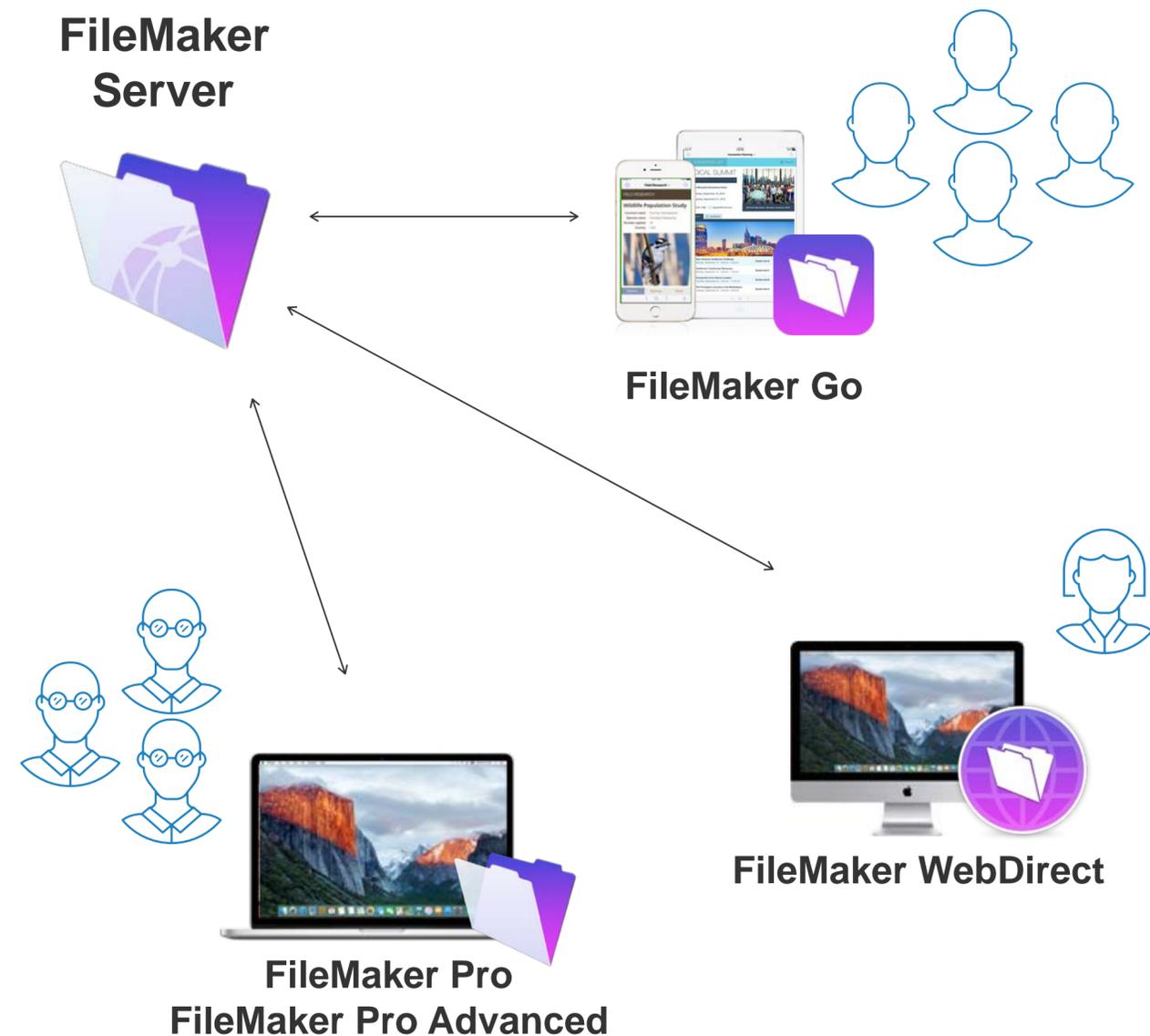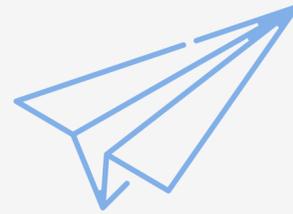# Determine deployment strategy

- Build a custom app

- Use the FileMaker Platform

- Host your app

- Consider data sources

- Decide what to buy

- **Determine deployment strategy**

- Determine backup strategy

- Plan for disaster recovery

- Considerations for system administrators

- Appendix A

3. Deploy

FileMaker.
An Apple Subsidiary
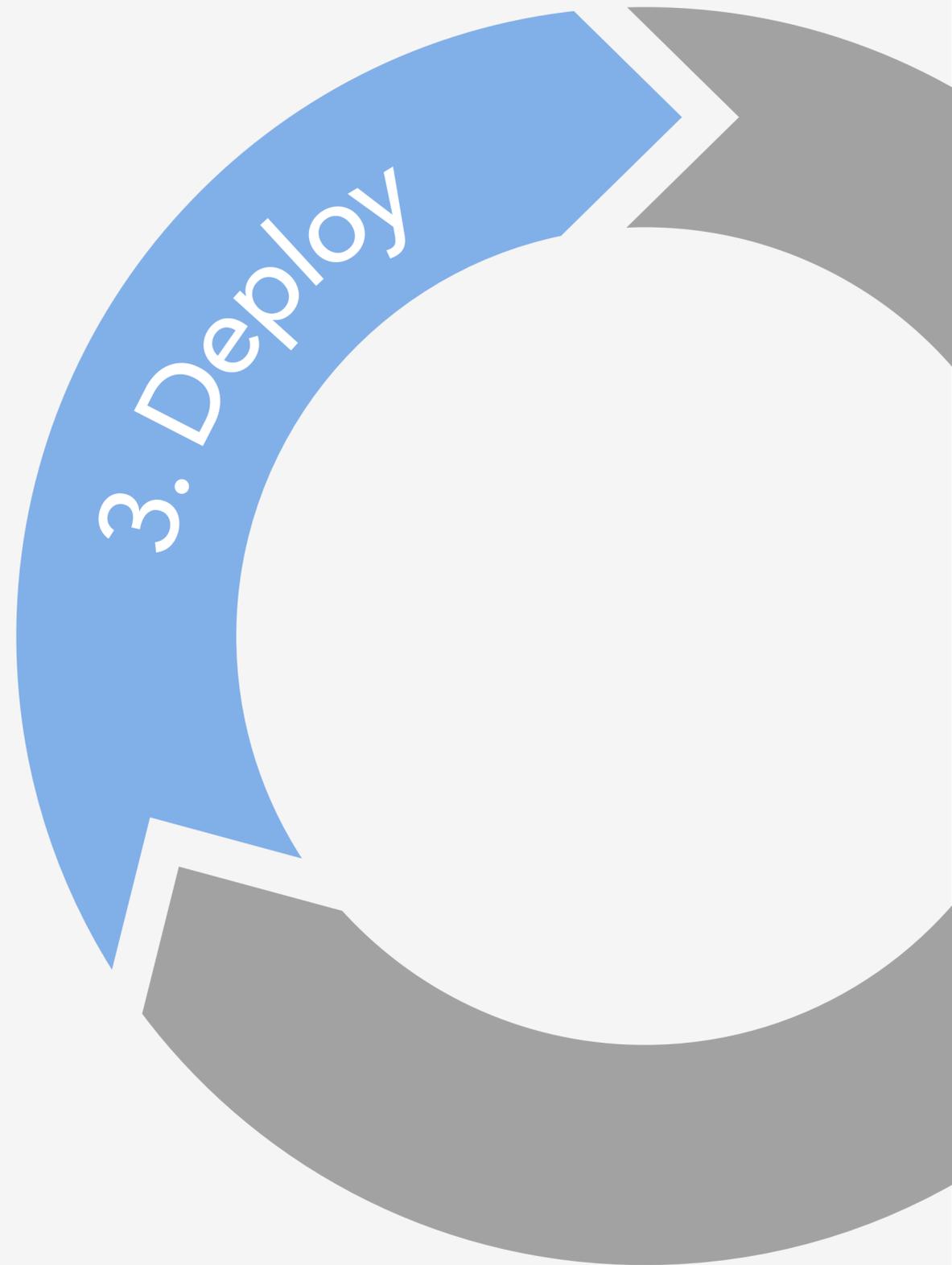
Deployment strategy

The term "deployment" refers to the various technologies and techniques developers use to make apps available to users.

It also refers to the standard practices and procedures by which a hosted FileMaker app is maintained and kept running.

Developing your deployment strategy is an integral part of designing an app and should be done early in the design process.

FileMaker.
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Determine the best server deployment

When you install FileMaker Server, you'll install three things: a Web Server engine, a Web Publishing Engine and a Database Server.

You are given a choice whether to install all three components on one machine, or to install the web pieces on a separate machine. Consider installing both the Web Publishing Engine and Web Server on a separate machine for more robust performance if you anticipate a high web publishing load.

Determine hardware options

One-machine deployment

The Web Server provides content via web publishing clients, hosts the web-based Admin Console application, and handles data transfer tasks.
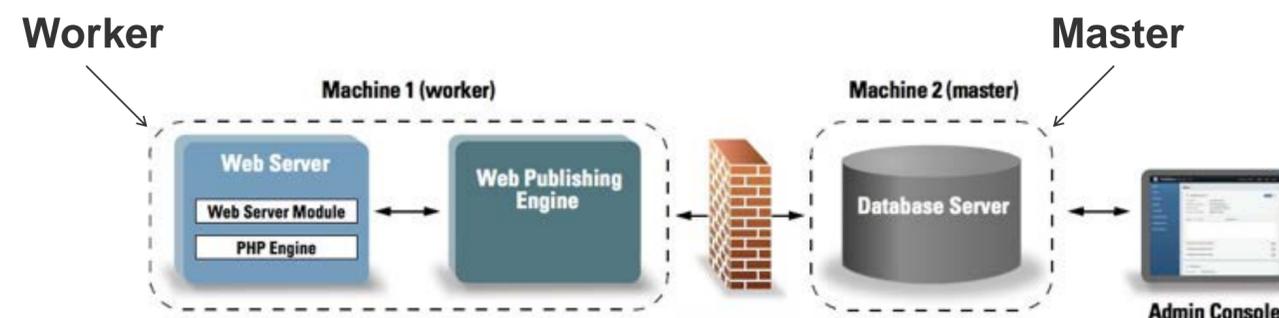
The diagram below shows the major server components in a one-machine deployment.
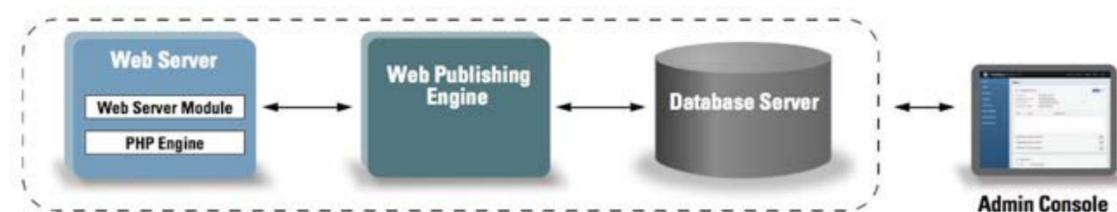
Two-machine deployment

This deployment separates all of the web publishing-related components from the Database Server.

The diagram below shows the major server components in a two-machine deployment.

Getting Started
Chapters 2 and 3

Deployment table

Use the following table to guide you in your deployment options.

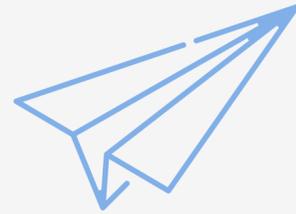| How will you use it?	What deployment fits your needs
FileMaker clients only	Single machine with Database Server only. No benefit from a two-machine deployment.
App development and testing	Single machine with or without Web Publishing Engine. No benefit from a two-machine deployment.
FileMaker clients and moderate web publishing	Single machine with Database Server and Web Publishing Engine. Provides good web publishing performance in most environments. You can expand to a two-machine deployment later, if web publishing load increases.
FileMaker clients and heavy web publishing load	Two machines. Deploy the Database Server on the master machine. Deploy the Web Publishing Engine and web server on a worker machine.

Determine authentication method

Choose an authentication method

FileMaker Pro allows you to define local accounts, or to use external accounts that employ external authentication through Open Directory and Active Directory. Consult with your IT team to determine the best method.

Obtain SSL certificate

FileMaker products include SSL certificates for testing use only. For production environments, you need to purchase a compatible custom 3rd-party certificate.

FileMaker Network
Security and SSL

Supported SSL
Certificates

Encryption
at Rest

Support for
Encrypted Passwords

Determine strategy

- Build a custom app

- Use the FileMaker Platform

- Host your app

- Consider data sources

- Decide what to buy

- Determine deployment strategy

- **Determine strategy**

- Plan for disaster recovery

- Considerations for system administrators

- Appendix A

3. Deploy

FileMaker
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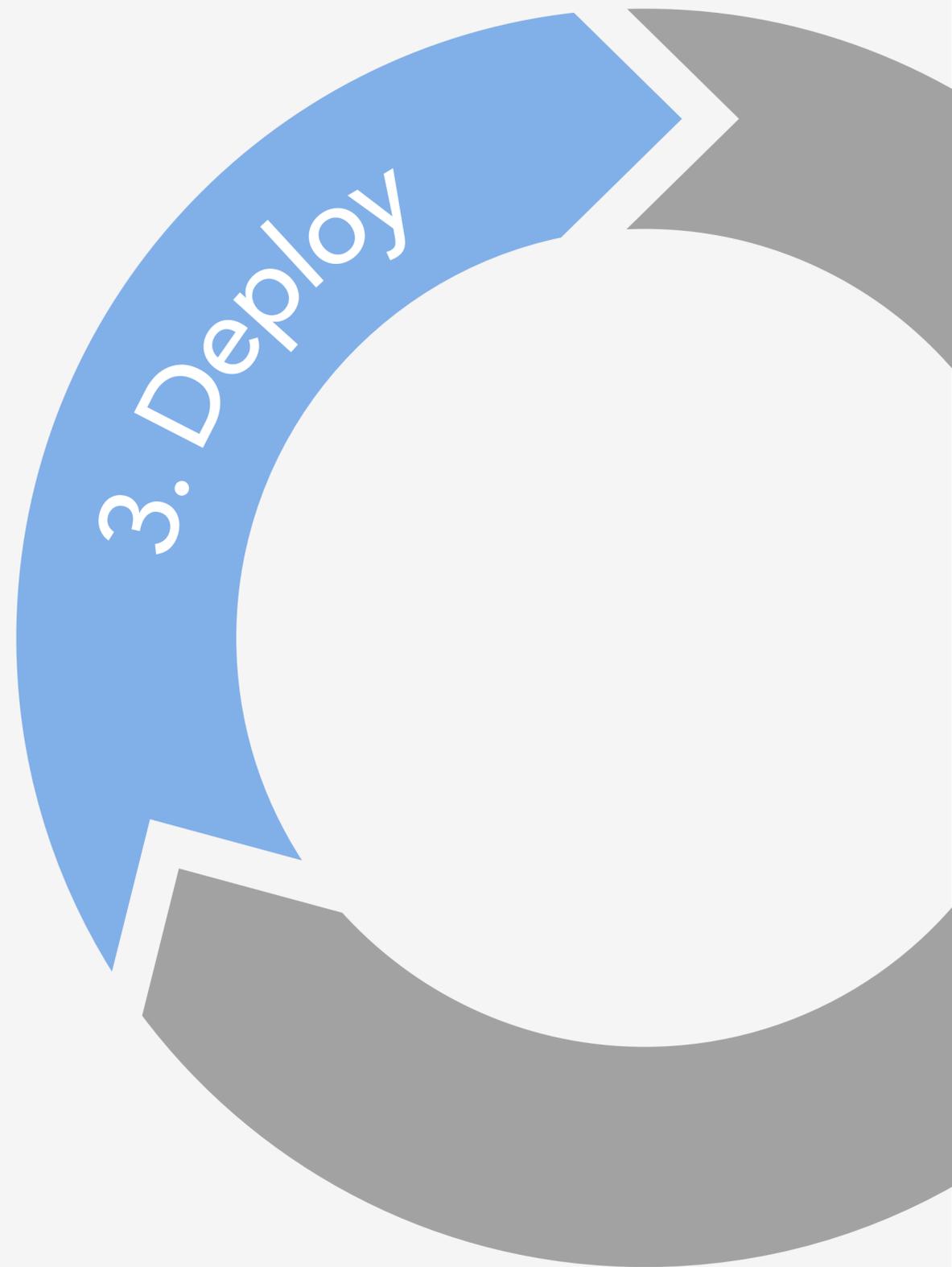
Determine backup strategy

It is essential to back up your data on a regular basis. How often you backup your data (everyday, several times a week, or some other frequency) depends on how quickly it changes, how much data you would lose, and how difficult it would be to re-create if it becomes corrupted or lost.

You have these options available to you:

- Scheduled backups

- Progressive backups

- Third-party backups

Creating Backups

Backing up your data

A is a copy of a database file that can be used if the original is lost, damaged, or otherwise irretrievable. FileMaker Server provides the option of saving complete backups of your files at a scheduled time. You can also maintain progressive backups, which are updated incrementally as your files change.

Scheduled Backups

Schedule full backups of your files as often as is feasible without adversely affecting how your app performs for your users. This should happen at least once every 24 hours.

Progressive Backups

Schedule progressive backups as a complement to your full backups. Progressive backups can help fill in the gaps between your full backups, since they are updating much more frequently.

Third-party Backups

Do not use third-party software for databases while they are live and in use. Doing so can be severely detrimental to the stability of database files and may cause corruption or other irreversible damage. However, you should use third-party software to archive your FileMaker file.
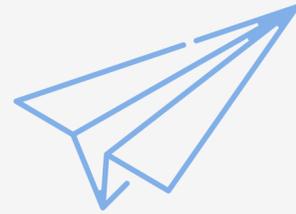
Creating Backups

Plan for disaster recovery

- Build a custom app
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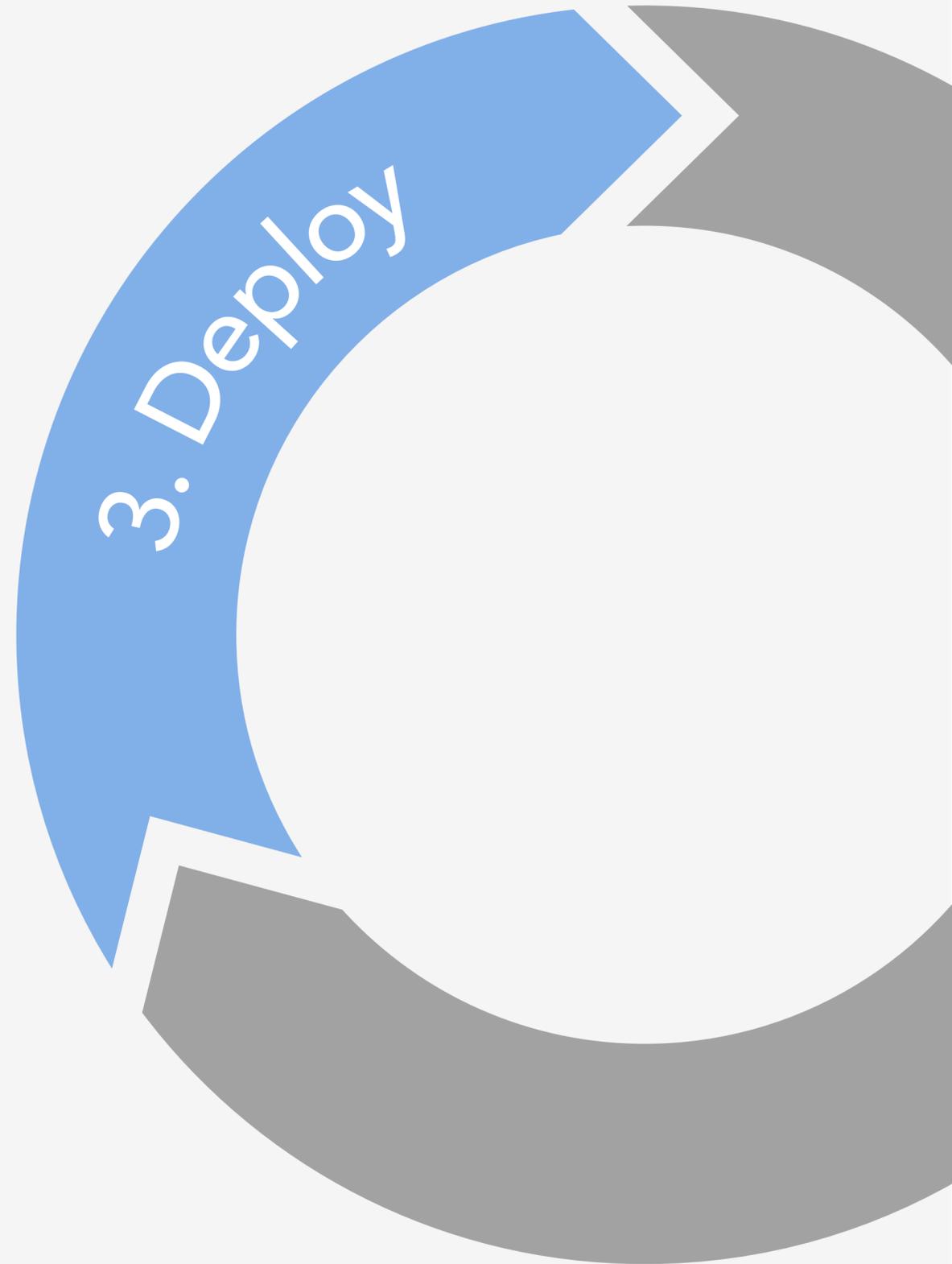
Plan for disaster recovery

A standby server is a recent copy of your FileMaker server that is ready to be deployed in its place in the event of a hardware or software failure. This copy can be used as a replacement of the primary server in the event of a hardware or software failure.

A standby server does not host databases for clients, but stands ready to replace the primary server when needed. You can also use a standby server temporarily when performing upgrades on the primary server.
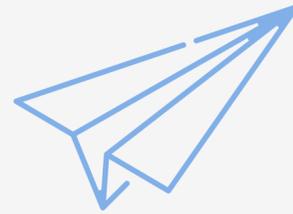
FileMaker Server

Duplicate Server

Getting Started
Chapter 9

FileMaker
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Considerations for system administrators

- Build a custom app

- Use the FileMaker Platform

- Host your app

- Consider data sources

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- **Considerations for system administrators**

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FileMaker
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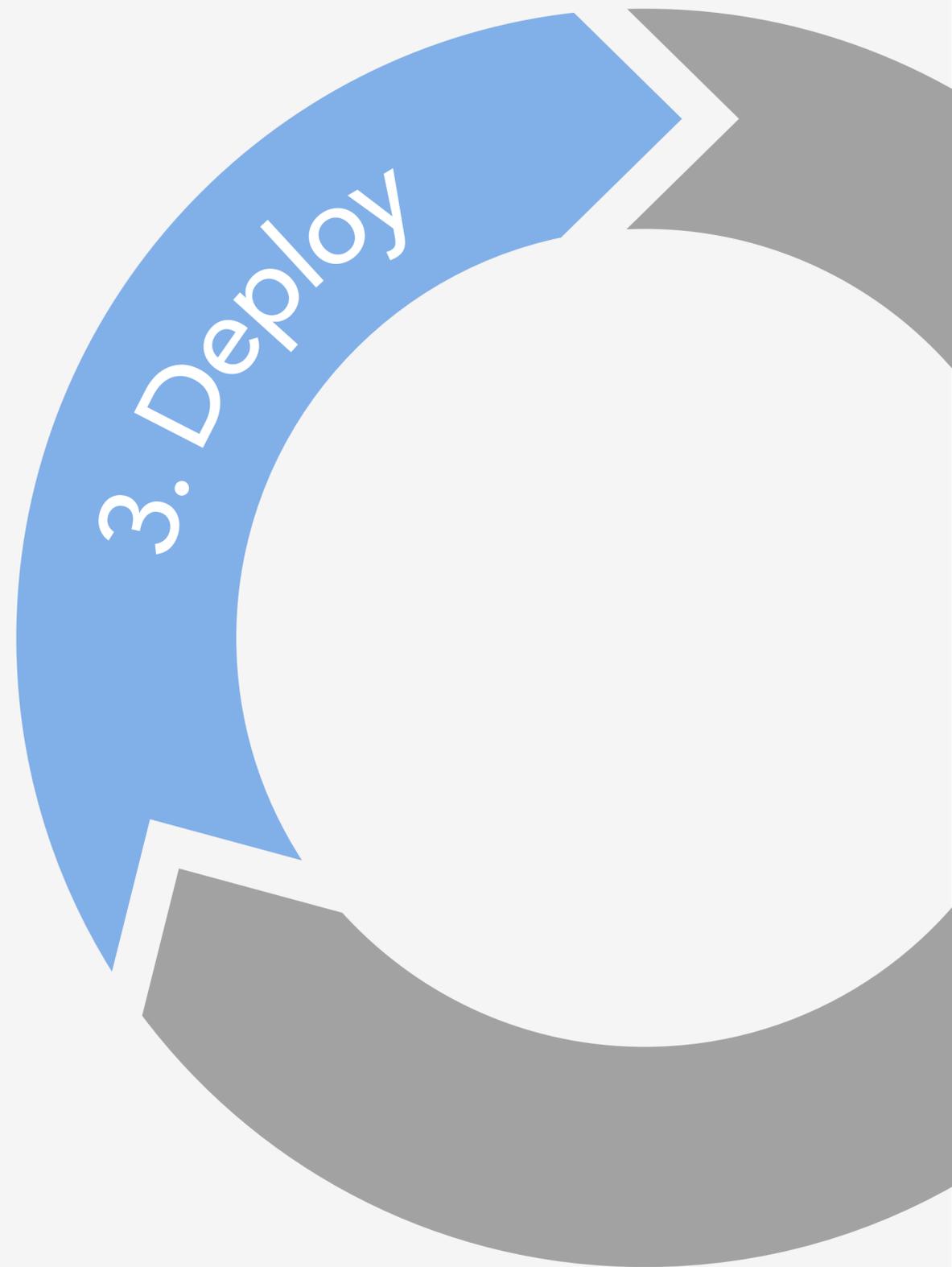
What do you discuss with your system administrator?

Required hardware and software
Check that you have the right hardware and software for FileMaker Platform to perform efficiently.
Check that you have the right disk subsystem, processor, memory, LAN, WAN.
Make sure your users are running on a supported OS.
Ensure you have performance monitoring tools for FileMaker Server.
Check that anti-virus software is disabled during server installation.

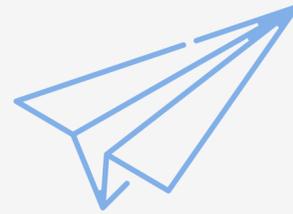| Network configuration |
|---|
| Check the number of users that will access the app at the same time. Check the number of User Connections. |
| Check port availability for optimum FileMaker Server performance. |
| Decide if you will set up a standby server for failover and disaster recovery. |
| Determine if you need help forwarding ports 5003, 80, 443 in the router. |

FileMaker Server
Technical Specifications

Sharing Solutions
over a WAN

Connecting FileMaker Go
to a Hosted Solution

FileMaker
An Apple Subsidiary

What do you discuss with your system administrator?

| Deployment |
|---|
| Determine how users will access your app, via their desktop, mobile device, and/or browser. |
| Decide if you will install FileMaker Server on one machine or two machines. |
| Define what kind of data plan you want to set up. |
| Decide if you will need third-party software. |

Connectivity
Check if users need to connect to an External SQL Data Source.
Evaluate if you will allow data sharing via ODBC and JDBC.

Security
Decide if you will implement internal or external authentication (Active Directory or Open Directory).
Determine if you will need an SSL certificate.

Introduction to External SQL Sources

ODBC / JDBC Integration Overview

Accessing External SQL Data Sources

Connecting FileMaker Go to a Hosted Solutions

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Appendix A

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FileMaker.
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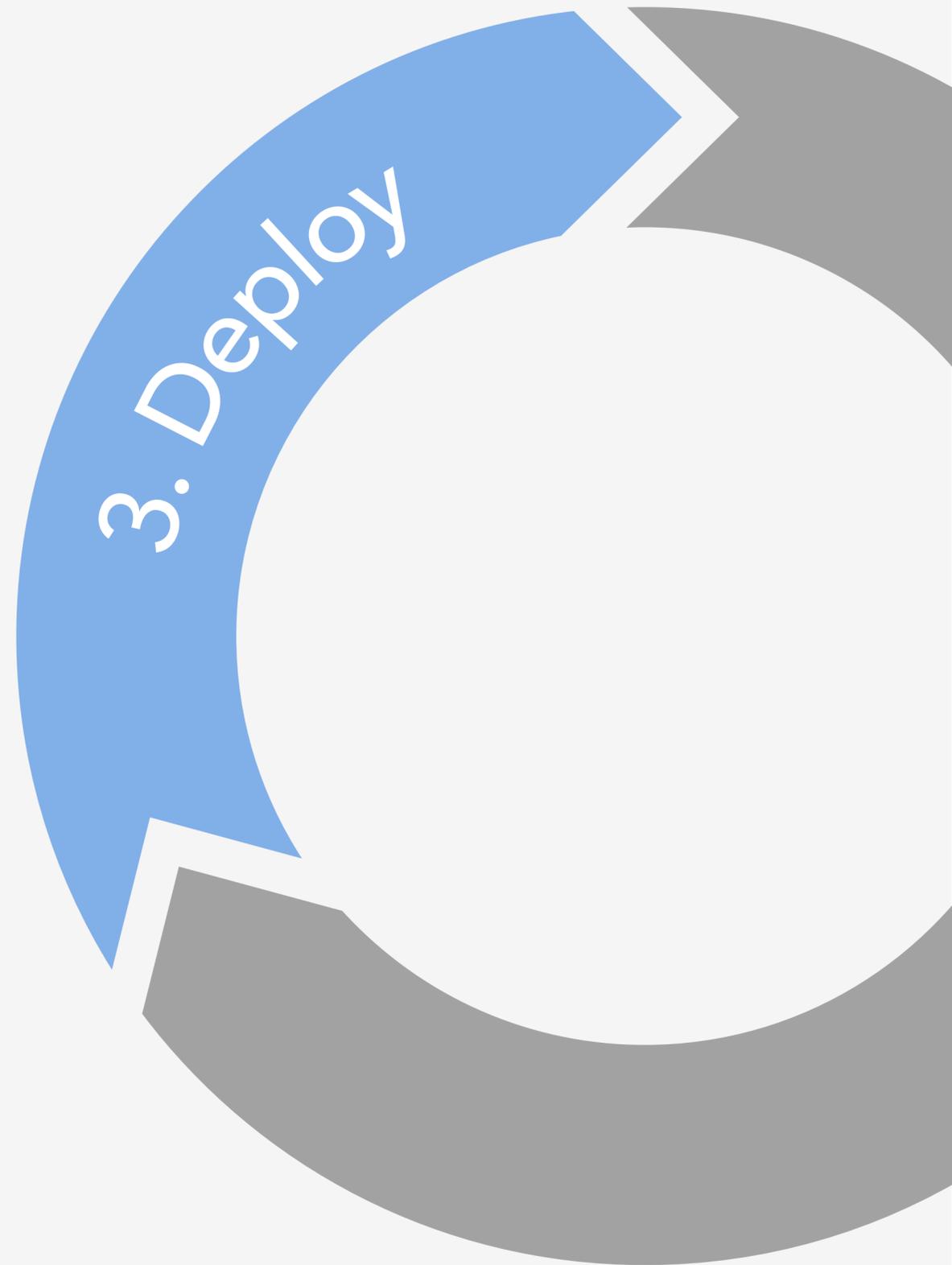
Extending the availability of your apps

Type of clients	Tested and certified	Maximum allowed
FileMaker Pro (individual licenses and legacy licensing)	250	Unrestricted*
Custom Web Publishing (CWP)**	200	2000
ODBC/JDBC	50	Unrestricted*
User Connections for FileMaker Pro	100	100
User Connections for FileMaker Go	100	100
User Connections for FileMaker WebDirect	100	100

 * Connections are limited only by your hardware, database design, and operating system.
 ** Multiple users can share a single CWP connection. CWP connections are based on simultaneous request events, rather than persistent connections.

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Next steps

For a complete list of resources on getting started with the FileMaker Platform, please visit:

FileMaker Starter Kit

To get your team started with the FileMaker Platform, contact us:

www.filemaker.com/company/intl/

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