



Request for Proposal

PRAGMATIC PLAY PRESENTS

JURASSIC GIANTS™



PRAGMATIC PLAY™

THE ULTIMATE VEGAS EXPERIENCE

Contents

/ Management Summary 4

/ References 6

/ Service Model 9

Account Management
Development, Testing & Project
Management
Deployment

/ Roadmap 14

/ Technical Details 15

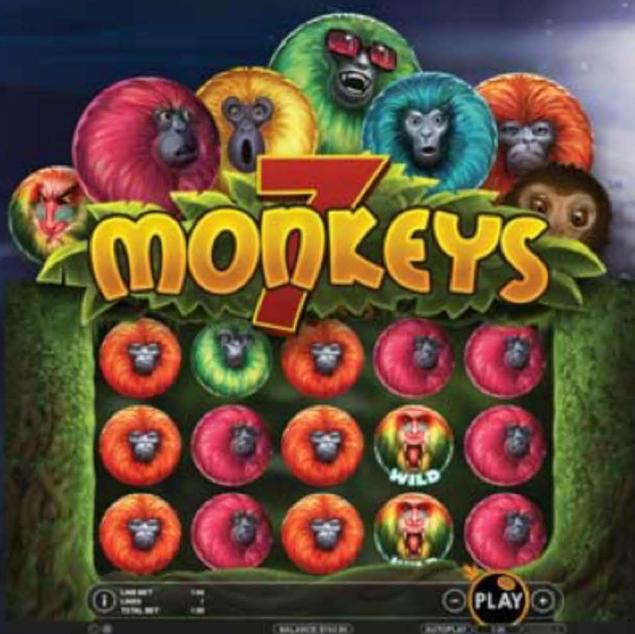
Software
Equipment
Capacity
Architecture & Integration

Pragmatic Play Management Summary

Pragmatic Play™ is pleased to present a proposal for the launch of our award-winning gaming content. Pragmatic Play, founded in 2015, is driven by a passion to create unrivalled gaming experiences that engage and excite players. As a fast-growing provider of mobile and desktop digital casino games for the online gaming industry, we offer a unique and innovative library of in-house content to operators around the world. All of Pragmatic Play's products are developed in our studios where a tightly-knit group of expert game developers puts their stamp of quality on each stage of the development process, from concept, to algorithms, graphics and sounds. By adopting a mobile-first approach to our games, we ensure that we can offer comprehensive casino gaming that has the flexibility to be adapted to any mobile or desktop device. Each one of our games is optimized to play smoothly and reliably regardless of screen size and device specs. Even as we keep adding advanced features to our games, we retain compatibility with older devices. In this way, we have the ability of running advanced games with complex animation and sound on mobile devices that are over four years old, subject to HTML5 availability. Since internet speeds tend to fluctuate widely in different parts of the world, we have built our system framework to counter these variations by keeping the download time of our games as short as possible.

We continuously monitor the time it takes for users to access our games and work to enhance their experience and improve scalability by optimizing our distribution channels through 'deferred loading'. This solution allows users to start a game by downloading only the minimum essential assets they need to play it, while the other elements that are not immediately required are downloaded in the background as the game session is underway.

These creative solutions are fostered in an agile environment where developers and designers are free to innovate our new features, backed by real-life UX, player retention and acquisition data collected by our R&D department. Using this data-driven approach to development, we can quickly build and test many commercially viable prototypes based on actual business needs. This lets us uncover and target a wider array of demographic and cultural niches that may otherwise be overlooked. In 2017, Pragmatic play intends to increase its footprint in the UK through Tier 1 operator partnerships with several integrations and commercial negotiations on-going.



References



Our clients are our greatest ambassadors – here are just a few examples of their feedback:

“While other games providers are trying to encourage engagement with gamification and achievements, which are frankly peripheral, Pragmatic Play are standing out by concentrating on what really matters. Solid games with solid mechanics that real players love.”

Andy Braithwaite,
Director at Betsson Group

“With Pragmatic Play’s library of HTML5 games we can serve our customers top-notch, non-stop entertainment on any device and connection speed.”

Victor Olinger,
Head of Gaming at Vera & John

“With over 100 slot games for mobile and desktop there’s something for every taste and game style in Pragmatic Play original collection.”

Martin Larsson,
Casino Manager at Leovegas

“Adding Pragmatic Play games to our site was a breeze. Their team supported us every step of the way and now our lobby is all the richer for it with their games.”

Mario Bilic,
Gaming Manager at Interwetten

“Pragmatic Play has developed some of most thrilling and creative slots. We are very happy to offer their games to our operators as one of the dominant, growing game providers on our platform.”

Nir Elbaz,
CEO, iSoftBet

“Pragmatic Play’s support team has always been prompt and super-helpful whenever we ran into some difficulties or just needed a quick explanation to sort things out.”

Andrew Crosby,
Head of Casinos at Mr.Green

“Customer support is always available when needed, and Pragmatic Play have been quick to respond to our queries before and after integration.”

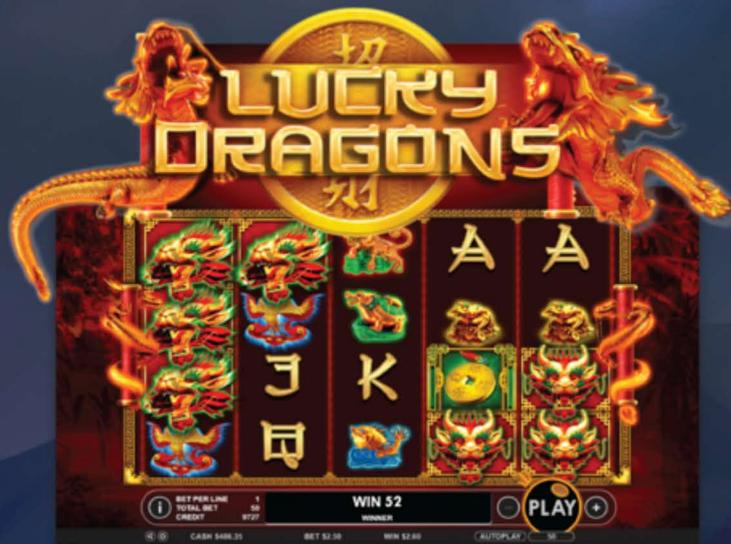
Daniel Hansen,
Head of Games at Videoslots

“Integrating games from Pragmatic Play’s collection is unbelievably easy and quick. We had no issues during the process and in a relatively short time we could offer our operators an even wider choice of games than before.”

Andy Hollis,
Games Manager at Quickfire

“Best 24/7 support that we have ever worked with, plus superb services. Pragmatic Play is not only strong in Europe, but penetrating global markets.”

August Young,
Head of Business Development at Opus Gaming



Gaming Content Proposed For Partners

Product

We believe a game must always have a valid reason to exist; therefore, we create an experience where players want to play right now and want to keep coming back. The focus of the game is not only on winning money, but having a good time doing so. Before delivering the final product, we ensure that all interface elements form a coherent, smooth and exciting experience through extensive testing and tweaking based on first-hand player feedback and behavior analysis.

Driven by our mantra of innovation, our team is continuously working on and bringing new and exhilarating games to market. This is possible through heavy investment in research and development, and our team's commitment to supporting our customers' needs.

Pragmatic Play offers a complete gaming solution comprised of an extensive suite of unique, high-quality casino games coupled with an unrivalled back-office management system.

Today, Pragmatic Play is one of the world's largest and most successful online casino suppliers and we have several of the most prominent gaming operators as our customers. Pragmatic Play prides itself on being a front-runner in game development using the latest technology, 3D graphics and animations. We're continuously introducing new and innovative features, functions and game ideas.

The result speaks for itself, when benchmarking operators using Pragmatic Play it becomes evident why our casino product has become highly appreciated and award winning.

The games are, however, just one side of the equation, equally important is the Back Office system used to manage the day-to-day casino operation. Similar to a banking system, the back office of a casino is where all financial transactions are handled. Every quarter, billions of game transactions and billions of Euros in wagers are managed in the Pragmatic Play Back Office system. This places a particular requirement on reliability, security and availability of the systems and infrastructure which is a key focus area.

- Games tested in a live environment for 30 days prior to European release, ensures minimization of game bugs.
- 80+ high quality video slots in Flash and HTML5 versions
- 3 classic slots with 4 types of reel formats
- 9 table games, including roulettes, baccarat, blackjack, casino war
- Other games, including video pokers, keno, and racing games

Product Pragmatic Play Features

Summary of Pragmatic plays current status

- Fluid Bonus system which works across platforms, Mobile/Desktop
- Fully POP integrated (Latest Version)
- All new content UK certified from day of launch
- 2 game releases per month (Pragmatic play have never missed a release date from roadmap)
- Seamless wallet
- In game Tournaments
- Feature bonus and trigger based events tool kit in development

Back Office

A cornerstone in every successful online casino operation is extensive management capabilities, access to key data and the tools allowing you to control and actively manage the casino, in real time.

The back office system of Pragmatic Play has its roots in the experiences gained in well over 30 year's experience of land based casino operation. In addition, learning's from 10 years of online casino operation has been added. As a consequence the Pragmatic Play Back office system is easy and intuitive to use and comprises the features and functions required to run a successful casino operation. This includes not only a powerful reporting engine, allowing you to generate standard and ad-hoc reports in seconds, but equally easy to use wizards for routine tasks such as managing casino tournaments and bonus programs.

The system allows you to instantly follow up and monitor the performance of a game, a tournament, or a player in every detail – down to the result of a specific game round. With the management capabilities provided within Pragmatic Play, you will be able to optimize your casino operation, maximize business volumes and minimize your risk exposure.

Account Management

Pragmatic Play provides Partners with a dedicated Account Manager as an integral part of the service. The primary objective of the Account Manager is to aid, advise and to work proactively to increase revenues for partners. The Account Manager is responsible for both business developments in working to develop your online gaming business as well as account management to ensure the highest possible level of client satisfaction.

The Account Management team is staffed to give full attention to your requirements whether you are in the early stages of launching our award-winning slots or exploring ways to grow the mutual business. Between them, our Account Management team has extensive experience to draw on when helping to design e.g. a tournament or bonus program. Just as important as giving recommendations regarding effective measures is giving advice about what not to do.

Account Management Includes:

- Training of how-to-use the Back-office
- Provide suggestions, tips and hints regarding promotional activities
- Provide suggestions, tips and hints regarding player bonuses
- Provide suggestions, tips and hints regarding player tournaments
- Proactively work with the client casino manager
- Actively keep clients informed about product developments, i.e. new features, functions, games etc
- Assume a consultancy role providing the clients with expert advice and recommendations on how to grow the business
- Keep close track on client's performance and take proactive measures in the event of deviations from expected fall-out
- Respond to client's customer queries and requests
- Set up and agree a joint casino business plan with the Operator
- Collect customer requirements and feed these back to the appropriate department within Pragmatic Play
- Identify any new business opportunities with the client and offer additional products and services
- Plan every release in close contact with the client for a smooth and immediate release of the new games of a new release
- Manage and monitor Change and Feature request
- Provide promotional material for marketing campaigns

Service Delivery & Support

Pragmatic Play made it a priority to provide the highest level of Service Delivery and Support to our Operators.

Standard Support

The Pragmatic Play Support Team is a single point of contact during office hours, for reporting of faults and incidents with the service. This will ensure that our partners will always have expertise at hand to provide answers to technical questions, documentation, operation, etc. As part of our Service Delivery we also monitor your casino from an operative perspective whereby we normally detect potential issues in time whereby they often can be addressed before they become an issue. As part of our Service Delivery we will provide regular system upgrades comprising new games and functionality.

Emergency Support

The Emergency Support Team will provide technical assistance for Priority 1 issues. The emergency service is available 24/7 and will help to restore the service and system availability in case of a critical incident.

Hours of Coverage and Means of Contact:

Severity Level	Priority 1	Priority 2	Priority 3
Support Service Available	24/7	Business Hours	Business Hours
Reporting Method	Phone	Email	Email

Technical Support Services

With regard to software infrastructure maintenance support and the related technical services, Pragmatic Play will provide the following

- All software and approved third party software installation and troubleshooting
- Install Game software application release and updates
- Baseline monitoring of server, network, client and other applications availability
- Monitoring of component performance and availability
- 24 hours a day, 7 days a week availability monitoring, incident management and resolution, application releases, server and client component maintenance, and service reporting
- Software configuration and management
- Administrate database maintenance and backup services and will make all reasonable attempts to recover and restore information in the event of data corruption or data loss
- Provide service reporting
- At present, support is provided via our Support Team during normal business

hours and via an Emergency Support Team during out of office hours.

- Commercial support is provided via Pragmatic Play’s assigned Account Manager.

Ensuring that Partner staff has the relevant knowledge of **Pragmatic Play content** is critical for the success for all parties. As Pragmatic Play has 30 years of background in the offline industry as well as over 10+ years of experience in the online industry, we will not only provide you with expert advice on how to use our content, but also how you can optimize performance of your online offering. Furthermore, we will ensure that relevant employees are educated and comfortable, as well as continually updated, in using the **Pragmatic Play content and marketing tools**.

PRAGMATIC PLAY™

THE ULTIMATE VEGAS EXPERIENCE



3 Kingdoms BATTLE OF RED CLIFFS

Reference and Growth Data

Here are some headline statistics which illustrate Pragmatic Play’s rapid growth since launch in August 2015 (the figures are correct as of April 2017)

- Bets: 4000% increase
- Players: 2500% increase
- Spins: 4500% increase

Roadmap



Upcoming Games	Game ID	Media Pack	Available for Testing	Available for Operators
3 Kingdoms – Battle of Red Cliffs	vs25kingdoms	April 6th	April 24th	May 11th
8 Dragons™	vs20eightdragons	May 18th	May 25th	June 1st
Gold Train™	vs3train	May 9th	May 22nd	June 29th
888 Dragons™	vs1dragon8	June 13th	June 22nd	July 13th
Jurassic Giants™	vs4096jurassic	May 30th	June 22nd	July 27th
Pixie Wings™	vs50pixie	July 18th	July 27th	August 31st
Caishen's Gold™	vs243fortune	July 27th	August 3rd	September 28th

Technical Details

Software

To provide the games to players as smoothly as possible, we feel it is important to clearly understand the functionality that should be provided by both partners. The table below describes the part provided by Pragmatic Play and the other part that should be provided by the Operator.

Provided By Pragmatic Play	To Be Provided By Operator
<p>Gaming platform and it's services:</p> <p>Web Services for intergration with the remote player's wallet</p> <p>HTML% and Flash Game client in all supported languages</p> <p>The API for intergration with Pragmatic Play Game History, Free Rounds and Jackpots</p> <p>Testing environments to games</p>	<p>Casino system where players can login, register and manage their accounts</p> <p>External Wallet API for intergration with Pragmatic Play in Seamless Wallet or Balance Transfer Mode</p> <p>Game Lobby with links and navigation</p>

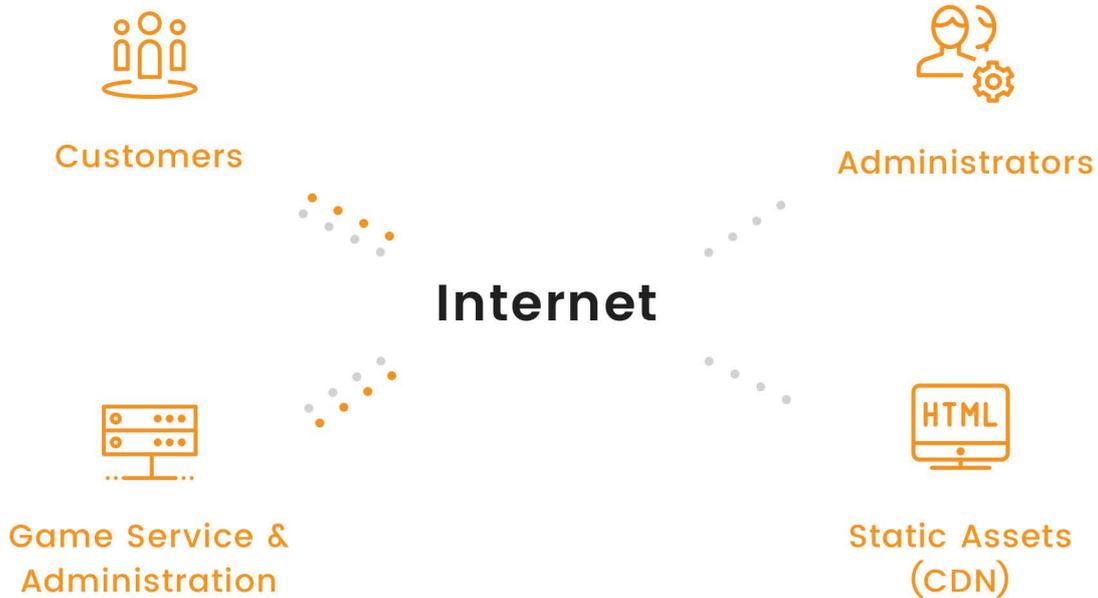
The Pragmatic Play application platform is based on Ubuntu, Java SE 8 and third party open source proven frameworks and libraries. Automated application and deployment is supported for all production environments as well as unit and integration tests for every build.

The database is based on Sent OS and Oracle 11g server.

Content is separated from application code and is handled by Content Delivery Networks.

The Pragmatic Play development environment is based on Subversion, Git for revision control, Maven for builds, Jenkins and Ansible for managing builds, deployments and configuration control. Tools for code metrics and quality are also used, such as Cobertura, Jacoco and FindBugs.

Equipment



The typical hardware configuration for the environment is as follows:

- 3 x 1U Servers (Dell R630)
- 3 x 2U Servers (Dell R730)
- 1 x 1U Network Switch (Cisco C3560X)
- 1 x 1U Firewall (Cisco ASA 5515)
- Total of 11U

Prerequisites:

- 24 Switchports
- 13 HU Cabinet
- 2 x 192.168.x.x/24
- 6 Public IP
- iDrac Login

Capacity

In the current set up each Pragmatic Play environment can handle up to 2500 concurrent players making 300 spins per second with the response time 400-800 milliseconds depending on the capacity of Operator’s wallet servers.

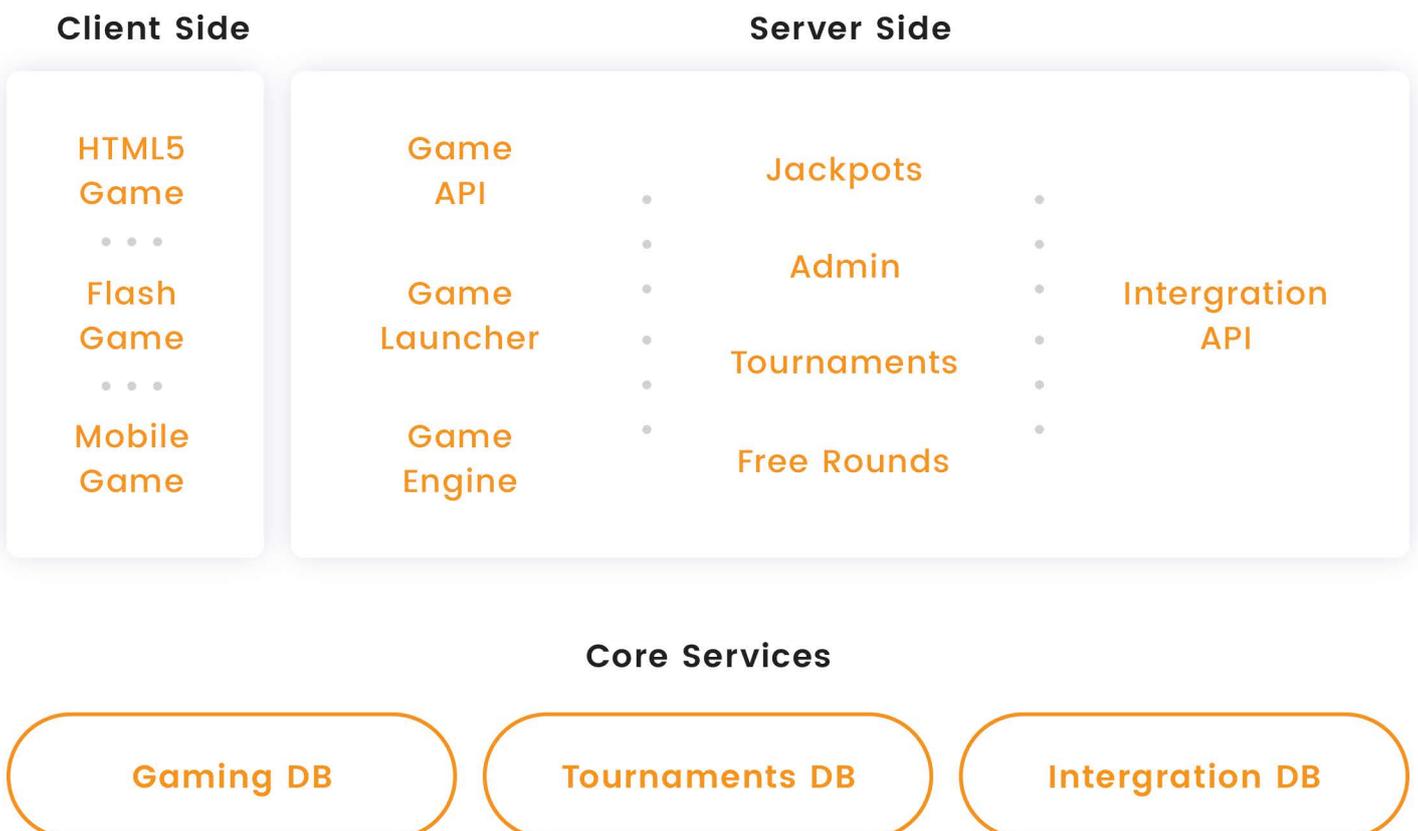
The gaming platform has a scaling clustered architecture, so that its capacity can be increased if the number of concurrent players grows.

Each critical release, which may affect the system performance is preceded by a thorough load testing. This approach allows Pragmatic Play to prevent performance issues on the production environments and keep them stable and reliable.

Architecture and Intergration

Architecture

The Pragmatic Play gaming system is built on well-proven industry standard technologies for high-performance and high-availability systems. The architecture combines scalability with stability and security. A core principle in the design is to maintain financial transaction integrity.



Capacity Components of the Application Architectures:

HTML5 game – Browser based game client for desktop computers, built using HTML5 technology

Flash game – Browser based game client for desktop computers, built using Adobe Flash technology

Mobile game – Browser based game client with game screen adopted for mobile devices, built using HTML5 technology

Game API – The gameplay API for game clients exposing by game server

Game Launcher – The application component, which is responsible for launching the games

Game Engine – The core functionality of game server, which supports game logic and is responsible for game RTP

Tournaments – The application component running tournaments based on gaming events

Free Rounds – The application component, which maintains free rounds awarded to players.

Jackpots – The application component, which is responsible for Jackpot creation, maintenance and winnings.

Integration API – The integration service used for integration with remote player's wallet hosted by an Operator. Contains a set of API for getting game lists, transfer

money to player's wallet for Transfer Money integrations and for integration with Pragmatic Free Rounds.

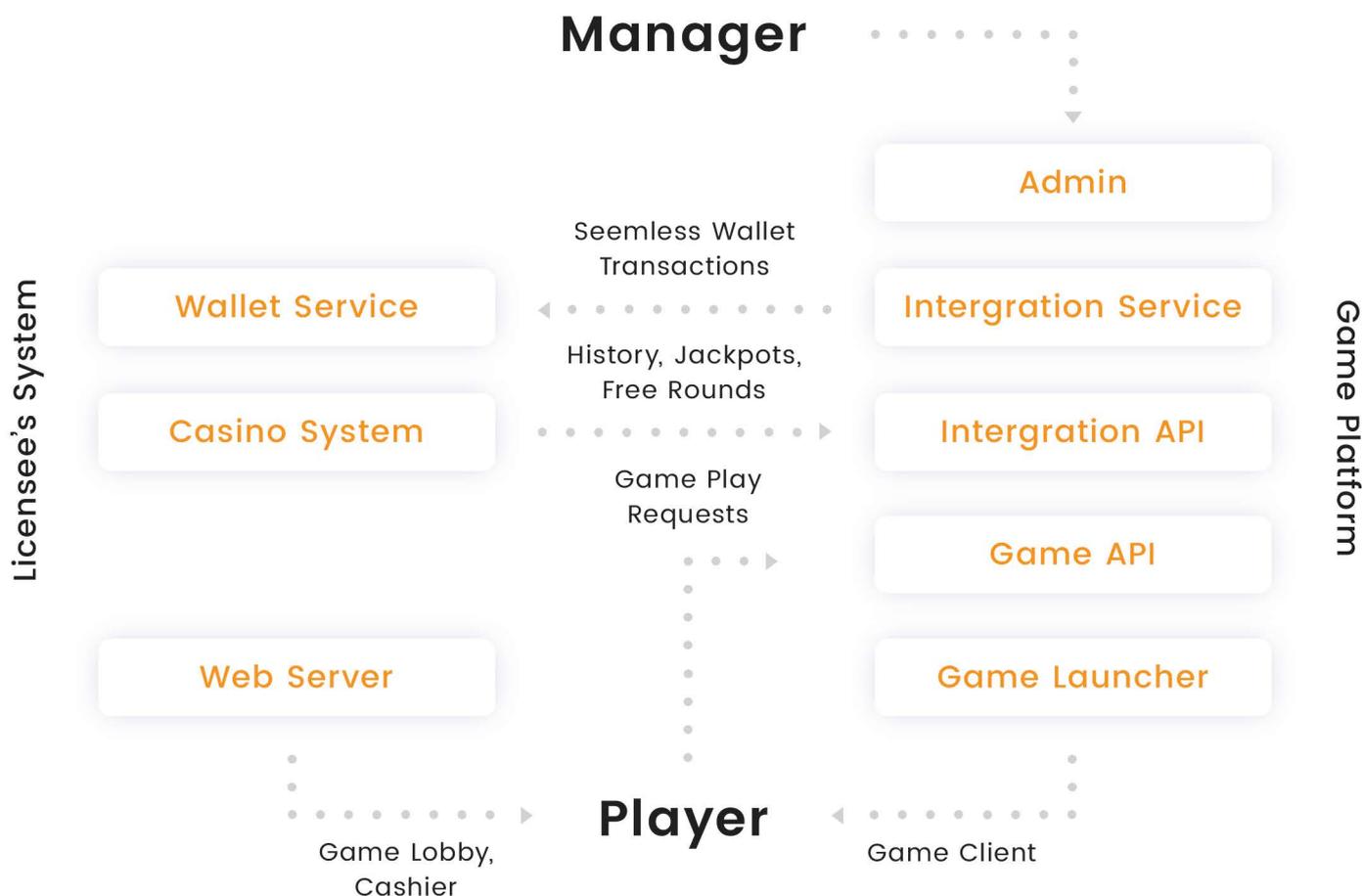
Admin – The web application where account managers and operators can configure the list of games available for their players, choose games RTP, set up tournaments, look at the player's game history, reports and statistics.

Core services – The internal services for managing games, game configurations, player accounts, game sessions, security tokens, exchange rates, etc.

Gaming DB, Integration DB, Tournaments DB – the databases where all data are stored, such as gameplay data, free rounds, jackpot statistics and contributions, bet and win transactions, game statistics, etc.

Standard Intergation

Pragmatic Play hosts all the games in the Game Platform servers. When a player requests a Pragmatic Play game by clicking a link on the Operator's web site, the client-side part of the game is sent as an HTML5 page or Flash file to the player's web browser.



The Operator's system interacts with the Pragmatic Play Game Platform via the Integration Service API, a simple JSON interface over https. The Integration API provides services for managing player logon and auto-registration in the Pragmatic Play database, game launching, free rounds and many other features of Pragmatic Play.