



2019 Real-Time Payments Report

A Readiness Report for Financial Institutions

2019 | Featuring Insights On...

- » Current RTP Integration Trends in the Market
- » RTP Capabilities and Functionality
- » How Financial Institutions Can Prepare for RTP
- » The State of RTP Readiness

Underwritten in Part By



Contents

Introduction.....	3
Overview of Real-Time Payments.....	4
Real-Time Payments in the Market Today	9
Preparing for Real-Time Payments.....	14
Conclusion	18
Intel	19
Red Hat	20
About Level Research	22



Introduction

For the first time in more than forty years, a new payment rail has emerged in the United States. Called “real-time payments” (RTP), and created and facilitated by The Clearing House (TCH), it allows for instantaneous, secure payments between financial institutions. As countries around the world build their own real-time payment rails, RTP will have a significant impact on both the US and international markets.

In addition to enabling payments to be made in real time, RTP also allows for useful data, such as invoice details, to be included in payments, a capability that has been challenging to achieve up to this point. RTP will not only fundamentally transform the payment experience, but will also create net new business models for services that financial institutions can offer on top of the RTP rail.

Many financial institutions (FIs) are already aware of or are developing systems to support the new payment rail. Larger FIs are moving quickly towards offering RTP capabilities. Even though the majority of consumers and businesses are not yet aware of RTP, some are beginning to understand the benefits of RTP as several FIs begin marketing and customer education campaigns. As RTP starts to gain ground in the North American market, it is imperative for FIs to understand the value of the new payment method for their own operations, as well as how it could present them with opportunities to gain a competitive advantage.

This report serves as a readiness guide for FIs to prepare for and embrace the new payment rail. It offers an introduction to RTP and its components, technical elements, and adoption requirements. It looks at trends among North American FIs concerning current perceptions of and preparation for RTP technology, as well as barriers to adoption. Finally, it offers best practices and next steps for FIs that want to prepare their infrastructure to support RTP.



Overview of Real-Time Payments

RTP is a new rail for clearing and settling transactions between accounts at financial institutions that was created to better meet business and consumer expectations for a faster, smarter, more secure ubiquitous payments solution. After four years of development work with the support of its owner banks, the RTP network was launched by TCH in November 2017. That month, U.S. Bank and BNY Mellon completed the first RTP transaction; it took only three seconds.

RTP was designed to address shortcomings in traditional payment methods and enable consumers and businesses to send and receive immediate payments directly from their FI accounts. RTP serves as an alternative to checks and ACH (Automated Clearing House), which utilize batched or delayed payments. RTP allows entities to make instantaneous business-to-business (B2B), peer-to-peer (P2P), business-to-consumer (B2C), and consumer-to-business (C2B) transfers—24/7, 365 days/year.

The Current Payment Process

Before delving into RTP, it is helpful to examine the traditional payment process. In a B2B transaction, organizations often request a payment by sending an invoice in electronic or paper format. Once the invoice is matched to data in the client's AP system and any possible queries are addressed, the client will send the payment. This part of the payment process can take 30-60 days.

Clients have several payment options available to help them make transfers more efficient for consumers. Besides cash, checks are the most widely used method of sending money; they are also the most time-consuming. Wire transfers between bank accounts are secure and relatively fast—they usually take less than 24 hours—but are more expensive and thus more suited towards large, one-time deposits that demand immediate transfer.

Transfers via the ACH network, which was launched in 1974, are initiated in advance by a sender (or a requestor) and processed in batches by banks. While ACH payments are predictable and enable cash flow optimization, they are not real-time, and can take up to three days to clear. ACH transfers are best for organizations making frequent or recurring low-value payments.

Regardless of the payment method, receiving organizations must frequently log the deposit and manually match the payment to a corresponding invoice. During this process, it is common for payment information to be lost or misapplied,



and for data discrepancies to arise. Once the payment has been identified and associated with an invoice, the credit is posted to the receiving organization's accounts receivable (AR) system. The complete payment process often takes 60-90 days.

For P2P, B2C, and C2B scenarios, the payment settlement methods used today are not real-time and are usually low value. They also often require customers to share credit card, debit card, or bank account information online, by phone, or on paper. These payment experiences are unique to the financial institution or customer-facing application used, often resulting in a negative customer experience.

The overall payment process for businesses and consumers has gradually become more efficient. For example, ACH has launched same-day payment settlements, and certain functions of internal AP operations, such as invoice workflows, have begun to be automated. But compared to these advances, RTP is a giant leap forward; in time, it will transform the entire payments process.

How RTP Works

The RTP process involves a receiving bank, a sending bank, and a pre-funded Federal Reserve account. Real-time payments are executed through a credit transfer payment message within the RTP network. The transfer is initiated by the sending institution, received by the receiving institution, and finalized in under 15 seconds. This process is made possible through the use of consolidated Federal Reserve accounts in which the balances change relative to the amount of money transferred between institutions.

RTP Requirements

In order to be a participant in the RTP system, FIs must comply with TCH's "RTP Participation Rules" and "RTP Operating Rules," both of which are available on TCH's website. Additionally, if an FI will be an RTP originator, they must have a pre-funded balance, which is initially based on anticipated RTP activity, in their designated Federal Reserve account. Larger institutions may manage this balance themselves, while smaller institutions may utilize a funding agent. These funding agents may be corporate credit unions or FI service providers, and they assist with management of funds and provide the tools for an FI to manage its balance.



Each FI must also determine how it will connect to the network. This can be done via a private connection, a VPN, or through a third-party service provider (TPSP). Connecting through a TPSP is likely to provide functionality beyond connectivity, such as providing payment orchestration and other potential functionality commonly associated with FI service providers and/or payment hubs.

TCH is operating the network for the benefit of all participating institutions and not for profit, and it will keep the pricing the same for all participants, regardless of institution size. In addition to a single, simple price schedule, there are no volume discounts, no volume commitments, and no monthly minimums.

Functionality

The three main components of RTP functionality are receive, send, and request for payment (RFP). There are also other supporting messages for exchanging data and other information.

Receive

Receive functionality is a way for FIs to minimally participate in RTP. Once implemented, an FI's customers can receive real-time payments, but they cannot send payments, and may be limited in the peripheral functionality they can leverage.

Send

FIs that want to be RTP originators can provide their customers with the ability to send payments, as well as tie messaging to the payment for increased clarity. RTP transfers are limited to \$25,000, but this amount is expected to increase as RTP matures.

Request for Payment (RFP)

Since RTP is a push-only rail and banks are unable to pull funds from an account, RFP messages were created to enable customers to request payment. If the RFP is accepted by the recipient, it can then create the outgoing payment.



Other Messages

Additional messages can be attached to RTP payments. These messages can contain remittance information or payment-related messages, such as payment confirmation or a Request for Information (RFI). This synchronous messaging capability makes it easier for senders and payees to match up information at every step of the payment workflow.

In addition to the basic functionalities listed above, RTP has several other key features.

It supports requests for return of funds, payment acknowledgements, and funding balance information, which is critical in assisting sending entities to maintain their pre-funded account balance. The RTP network can initiate balance warnings, account requirement changes, and account breach notifications (similar to overdraft notices). In addition, banks can incorporate billing and fees into their RTP capabilities while moderating RTP channels between customers. Billers can send messages to their customers in real time, and customers can get immediate confirmation of their applied payments.

FIs are also able to build reporting functionality, allowing bank systems to record all transactional data—both internal processing between parties and external communications with TCH. Once FIs have built out this component, consumers and businesses can create reports regularly or upon request.

RTP takes the guesswork out of payments: Either the transaction goes through, or it does not. If any discrepancy arises, then the payment is immediately rejected. Once a payment does go through, it is immutable. Payments made with RTP are irrevocable, with an immediate, final settlement to the payee—a key element of real-time payments. Under RTP, pending payments and debits no longer exist, nor do payments in any type of incomplete status.

Use cases for RTP are manifold, including small business and P2P transactions, corporate transactions between AP departments, and loan disbursements. In the next few years, however, Levvel Research predicts that RTP will mostly benefit B2B, B2C, and C2B transactions rather than individual P2P payments.

RTP may also automate functionality some third-party businesses provide, such as automated bill payments, AP and cash management, and data reconciliation. Because RTP works in the background of customer-facing applications, it opens the door for API development and integration, as well as online platforms that



support the network. Level Research believes there are many opportunities for strategically and quickly integrating the RTP rail for FIs and third-party service providers, as well as for existing vendors that currently support the business payments ecosystem (e.g., ERPs, AP/AR providers).



Real-Time Payments in the Market Today

In order to gauge the current state of the payments market, Levvel Research conducted interviews with professionals in strategic roles at various North American financial institutions. The names of the individuals and their organizations will remain anonymous for the purpose of this report.

Leaders, Followers, and Hesitant Adopters

Among all interviewees, the general perception of RTP is that it is a progressive technology that will revolutionize global payments processes. Despite that perception, not all FIs are taking proactive steps toward enabling the technology. Based on interviews, Levvel Research has identified three high-level groups into which most FIs fall in their RTP preparedness: first-, second-, and third-wave adopters.

The **first wave** of FI adopters are those that recognized and reacted towards the coming of RTP when it was initially announced—and in some cases, before its infrastructure was even finalized. This wave consists primarily of large banks, several of which have been involved in the development of RTP since its inception in 2014. Since then, these banks have made significant strides in the adoption and integration of RTP into their systems. Many of those that do not yet support RTP have roadmaps in place to support it in the near future. Approximately 11 banks have built the infrastructure for send and/or receive and are live on the RTP network. Several more large banks support request for payment and other messages. More advanced FIs are building targeted RTP products for their business and commercial customers.

Second-wave institutions are those that acknowledge the importance and imminence of RTP, but are still in the planning stages of integration. Many of these FIs are mid-sized, regional, or credit unions, and are aware that the majority of the heavy work around RTP thus far has been and is being carried out by the major FIs in the North American market. While the majority of second-wave institutions are not yet prepared to fully support RTP functionality, many have begun strategic and technical planning for integration.

The **third wave** primarily comprises smaller and/or niche institutions that are either unaware of the rising importance of RTP or disregard its relevance. Part of this tepid acknowledgement of RTP by third-wave institutions lies in their perception of RTP as a tool outside of their needs or irrelevant to their customers' demands.



Capabilities

Among those organizations that have built technical support for RTP, most have started with receive. Only a small portion have live technical projects for all functionality. Starting with receive is a logical first step, as it is the easiest to build out, and it is the bare minimum required to participate in the network.

While some first-wave FIs are already equipped with or are currently building support for all relevant RTP capabilities, second-wave FIs are generally not planning broad functionality in the near future. Among second-wave interviewees, most are planning to start with receive functionality; not all will proceed to integrating send and messaging functionality. This is in part because although these second-wave FIs want to be able to join the RTP network to remain competitive, many lack the resources to concurrently build out a complete functionality set.

Drivers

Most interviewees in the first and second waves cited competitive advantage—at least in the short term—as their driver for planning for or integrating RTP. Many FIs acknowledge that supporting RTP will soon become a competitive necessity, and they do not want to be left behind. Although many FIs acknowledge that their customers are not yet asking about the technology, they expect this to change.

Customer Perceptions

Level Research has found that the market for RTP is being built and driven by suppliers rather than by consumers. Many innovative financial players are advancing with RTP technology before their customers are even aware of it, effectively building the demand within the market.

According to interviewees, most of these FIs' customer organizations are only starting to understand the implications of RTP. Customers may have heard an announcement from TCH or a major FI regarding the new rail, or they may have become aware of its development through market news. Some customers are asking about RTP, but they are not demanding it as of yet due to its recent launch and limited presence across organizations.

Despite the lack of awareness, many first-wave interviewees have communication plans and messaging campaigns in place to publicize the



value and potential use cases of RTP. Some have already released limited RTP functionality to their customers. One interviewee from a first-wave FI reports that their institution has already seen an increase in revenue and customer satisfaction since launching RTP functionality. Most institutions in the second wave have not yet started to communicate enablement plans to their customers, as they feel they are not far enough along in their preparation to warrant that message. Instead, these institutions report that their current focus is to educate internal stakeholders on the value of RTP.

While communicating the value of RTP is a strategic best practice, the functionality itself will not significantly change how business customers and consumers receive their payments at first. Much of the work performed by RTP, as well as the benefits it produces, occurs in the background. Several FI interviewees noted that their customers would be unlikely to notice or care about the change, except in how it improves their user experience.

Barriers

Several barriers currently prevent organizations from supporting RTP or enhancing their current solutions. For interviewees that have not yet taken on any RTP integration, doubt is the primary barrier to doing so. These FIs question whether RTP will become a prevailing method of payment in the way others in the industry are projecting, and if there will be crossover into other segments.

Organizations that have not begun to change their payments infrastructure to support RTP also have competing priorities. They might want to direct their resources toward other developments or investments that they perceive will have a better or more immediate ROI. Usage volume will come to RTP, but given the slow adoption rate in some areas of the market, the ROI will not be immediate. Those that choose to support RTP understand that their gains will be realized in the long term.

Another significant deterrent to RTP integration is its cost. Building out RTP infrastructure or purchasing a platform for the rail can be costly; these costs extend from the beginning stages of ideation and business strategy to development and implementation. Many banks will use TPSPs to connect to the RTP network, so ongoing costs from these service providers is an additional inhibitor to integration.



Some FIs are deterred by the difficulty of RTP implementation, which varies by bank. Larger banks face more complicated systems and internal hierarchies, whereas smaller banks face a mix of vendors and resource constraints. Smaller banks may have roadmaps based on vendor-supplied solutions, which often require less change internally, especially in cases in which the smaller institution currently uses a potential RTP vendor.

Finally, RTP's evolving landscape creates challenges for new implementations. The industry is still evolving, with new participants joining the network and TPSPs disrupting the marketplace. Institutions still determining what a solution might look like for them might be hesitant to invest resources in creating a plan that may need to be adapted or discarded.

Readiness and Next Steps

The first wave of FIs has been proactive in preparing for RTP. Some progressive FIs have even partnered with TCH in developing the rules and various technical parameters of the new rail. Levvel Research predicts these institutions will continue to have the opportunity to shape the payments environment for RTP and play a major role in promoting its use cases and value. The first wave FIs will likely see an increase in use of the RTP functionality as more institutions go live. Levvel Research advises that these institutions hold ideation sessions across their enterprises to discover innovative ways RTP can be used to augment existing products and create new products based on the new rail. Launching the integration is only a start; each FI will need to put resources and effort toward maximizing the customer opportunity over the long term.

Most second-wave FIs are still scoping the requirements for RTP enablement. Some teams are trying to work out exact use cases for the technology and customer functionality to target. Others are still working through technical questions, ranging from TPSP selection to specific solution and/or software design challenges. Levvel Research believes that second-wave FIs are generally committed to participating in RTP; however, many have not fully finalized their strategy, and are encountering internal barriers that are delaying their efforts.

Levvel Research advises second-wave FIs to focus on providing the right resources to properly assess technical and business challenges. On the technical side, it is critical to both address major difficulties up front and to minimize the occurrence of unexpected roadblocks. Examples of potential challenges include integrating into an FI's existing core system, evaluating servicing channels and



vendors for required functionality, assessing readiness for 24/7/365 operations, and most importantly, properly architecting the necessary integration patterns (especially for those using a TPSP). From a business perspective, the key areas to research are operations impacts, treasury governance processes, and reporting needs.

Level Research predicts the reluctance to adopt among the third wave could create a gap in competitive parity as RTP aims for ubiquity. Third-wave FIs recognize RTP is worth evaluating, but often do not know how to proceed because they either do not see the value, do not know where to start, or simply think they cannot do it. Level Research advises these FIs to evaluate the opportunities RTP presents carefully. These entities should focus on understanding the breadth of RTP's impact, whether it be B2B, B2C, C2B, or P2P, particularly with regard to their specific customer segment(s). Key use case areas include bill payments, corporate cash management functions, and even Zelle®. Additionally, these FIs should ensure they understand what the RTP journey will demand from a technical standpoint, with a particular focus on understanding the most strategic approach to integration and, if applicable, what types of vendors best fit their institution.

Overall, Level Research anticipates RTP will continue to move downstream from large banks to smaller FIs, with a continued rush toward integration through 2020 and beyond. The key will be for the industry to continue to collaborate at all levels, including between banks, service providers, and TCH. The full potential of RTP can only be effectuated if the entire industry works together to enable it.



Preparing for Real-Time Payments

With the assistance of TPSPs, TCH is targeting adoption by approximately 2,000 institutions by the end of 2019. They are aiming to reach 95 percent of Demand Deposit Accounts (DDAs) in the United States by 2020. Understandably, the path to ubiquity is not straightforward, as various FIs are in different stages of integration, depending on numerous internal and external factors. While TCH plans to aggressively expand the RTP network via methods such as town hall events, one-on-one meetings with FIs, and financial services conference presentations, Level Research believes that TCH can only reach their goals if FIs engage and proactively take steps to prepare for RTP.

FIs should prepare for the arrival of RTP in the marketplace by becoming more involved in its development and/or its messaging and education campaigns, participating either as second- or third-wave adopters. Becoming involved now as second-wave adopters means FIs can create innovative payment capabilities and digital payment transformation for their customers, as well as stay at the forefront of payment technology. Waiting to see what other key players are doing, however, may give third-wave adopters a better idea of how they want to approach RTP themselves.

All FIs should view RTP as an opportunity to not only transform payments, but also to redirect the industry path toward independence from the external vendors currently providing services to FIs. Even for FIs that understand the importance and urgency of preparing for RTP, it can be difficult to know where to start. Level Research recommends that all FIs should set concrete steps to begin moving forward, even if they must take those steps across a longer timeline. This begins with FIs putting the proper consideration and effort into plans now to decide what is best for their institution in the years to come.

Level Research recommends that FIs use the following best practices in order to prepare for the arrival of RTP.

Push RTP Education Internally

FIs should begin internal RTP education programs now to be prepared for the inevitability of widespread RTP adoption. The demand for faster, more efficient payments is shifting both domestic and global markets towards more progressive payment technologies like RTP. RTP uptake is expected to be precipitous, with nearly 100 percent of US DDAs reached by 2020, causing a shift in the way FIs,



businesses, and consumers view payments. Additionally, given the breadth of RTP impacts and the time such broad changes will require, organizations that begin internal RTP education now will have an unassailable advantage over those that wait.

To begin internal education, organizations should distribute research reports, white papers, and webinars internally, as well as send stakeholders to conferences and events that provide updates on RTP. Some organizations may want to reach out to consulting services for guidance—especially when architecting business models. Expert consultants can help build new tools or capabilities that leverage the RTP rail, as well as guide the actual implementation of the tool. They can also serve as a trusted partner to provide a detailed assessment of major areas of impact and ensure organizations sufficiently explore necessary areas.

Generating internal enthusiasm for an RTP project and gaining stakeholder buy-in is crucial for successful implementation. The drive toward RTP integration can either start from top executives and work its way down, or grow upwards from employees. At a minimum, Boards of Directors at FIs should be familiar with the state of the industry, and all stakeholders should educate themselves on what RTP has to offer.

Make a Business Case for RTP

An essential step in planning for RTP is to prepare a business case for it. As RTP integration affects more than just an FI's technology, all stakeholders should be involved in this portion of the process. The following are a number of ways to allay possible stakeholder concerns and assemble a case for the long-term ROI from RTP integration.

The synchronous nature of RTP messaging presents an opportunity for FIs to gain a significant edge in the market. Debit card, credit card, and ACH transactions are incapable of transmitting significant supplemental payment information such as remittance data. By contrast, RTP allows messages to be sent in real time, either attached to the accompanying payments or by themselves. For example, billers can send messages to any of their customers on the network and can receive an immediate response to any message, all with access to real-time status of payments or invoices. RTP messaging capabilities offer unprecedented visibility into payments for businesses and create new value propositions for clients.



RTP reduces operating costs and risks by effectively eliminating payment timelines, reducing error rates, and reducing payment-related expenses, such as costs associated with facilitating wire transfers. From the bank perspective, immediate payments enable better cash control and eliminate complexity thanks to payment certainty and irrevocability. In the long term, financial institutions that shift payments to RTP will experience a reduction in the end-to-end costs of payment transactions. These same benefits also apply to FI customers, particularly businesses.

Organizations that integrate RTP into their service offerings receive a significant competitive advantage over those that do not. As RTP and its functionality—a real-time, secure, smart payment method—become expected, FIs and other businesses will have the opportunity not only to retain existing customers but also to gain new ones who are looking for a more efficient, secure payment experience, thus engaging new market segments. Conversely, a lack of RTP integration will lead to the loss of customers to more progressive financial service providers.

Form Strategies to Expand Business Opportunities

With RTP, FIs can offer innovative payment services that deliver enhanced value to their customers, whether individual consumers or businesses. Organizations should consider how best to provide RTP access that simultaneously enables the monetization of their services and drives higher consumer spend. Product strategies for incorporating RTP should result in new, enhanced payment channels and increased revenue.

There are several strategic ways to approach RTP integration. Many FIs will be looking to add RTP capability to their existing platforms and applications that currently facilitate ACH and wire payments. They should analyze various use cases and determine how RTP may complement, compete with, or eliminate the need for other payment types offered by their organization.

FIs should decide how they will partner with the RTP network to create a better experience for their business customers—for example, by building a payment experience around invoice management or consolidating what have traditionally been separate divisions. Institutions should consider all possible ways in how they leverage RTP in order to create net new revenue models. Banks are in a strategic position to build out their capabilities and include functionality that was previously monopolized by TPSPs. There are significant opportunities to redefine



existing business models, and FIs must vigorously explore each of their business and product lines to identify new opportunities to provide value to the end customer.

Build an Integration Roadmap

Level Research suggests FIs work with a broad set of internal stakeholders to determine the best roadmap for their institution. This includes both determining the order of adoption for specific functionality and individual decisions on optional features. These decisions should be balanced not only internally but also against the competitive landscape.

Create Client Communication Plans

Finally, FIs should update their marketing to include both their existing solutions that will use RTP and their new RTP products. Educating customers, both businesses and consumers alike, is essential for them to realize the benefit of the new service. Many customers will choose to upgrade to RTP, even if it means paying more, simply because of its speed and efficiency, but recognition of the power of these benefits will require education. As more and more businesses and consumers become aware of the applications of this type of service, the more they will demand it be integrated into more products offered by their FI.

Garnering feedback from customers early on will also enable FIs to create more innovative solutions, as well as ensure that the products created are what consumers are looking for. Performing customer research based on the FI's client base, using focus groups to determine customer needs, and further educating customers on the use cases applicable to them will ensure the FI creates an environment in which RTP can succeed within their institution.



Conclusion

Although RTP will transform how financial institutions, business, consumers, and governments transfer funds, a majority of these stakeholders are not yet aware of the new technology. Consumers in particular are searching for a method of making smart, immediate payments, and financial institutions should be aware of this growing demand. FIs should not only stay informed on changes in the payments market and enhancements to TCH's new rail, but should also use their knowledge to create consumer-focused education.

Level Research believes that internal and external education will better prepare the market, and will help organizations maintain a competitive edge in this compelling new payments environment. Finally, RTP must not be approached lightly; FIs must take the time upfront to properly and thoroughly assess both their structure and their technologies. This will minimize problems and help FIs find the right partner(s) to help create and execute their RTP strategy.



Intel

Intel Corporation is a multinational corporation and technology company founded in 1986 and headquartered in Silicon Valley. Intel specializes in a variety of hardware and software products, and the company's innovations have played a major role in the development and use of personal computer (PC) technology around the world. Intel ranked forty-sixth in the 2018 Fortune 500 list of the largest United States corporations.

Founded	1986
Headquarters	Santa Clara, CA
Number of Employees	~107,100



Red Hat

Red Hat® is one of the world's leading providers of open source solutions. The company offers a comprehensive portfolio of open source technologies that have been battle-tested by the most demanding workloads within the financial services industry. These technologies form the foundation for organizations that are creating the newest and most innovative capabilities in the cloud—all without vendor lock-in. Financial service organizations are able to tap into the innovation created within open source communities and benefit from Red Hat's expertise, training, professional services, and support.

Founded	1993
Headquarters	Raleigh, NC
Other Locations	More than 95 offices spanning the globe
Number of Employees	~12,212
Number of Customers	Serves over 90 percent of Fortune 500 companies
Target Verticals	Government, Financial Services, Communication Service Providers, Tech and Medical
Partners/Resellers	Intel, AWS, Google, Microsoft
Awards/Recognitions	Software Vendor of the Year, European IT & Software Excellence Awards 2018; Cloud Innovator of the Year, Dynatrace at its EMEA Partner Summit 2018; Red Hat OpenShift was awarded Best Cloud Agile Technology in the second annual Computing DevOps Excellence Awards; Red Hat OpenShift was awarded Best Cloud Platform in the TechXLR8 2018 awards

Solution Overview

Red Hat helps organizations move new technology ideas and product changes to market more quickly through a leading cloud container platform that runs on any infrastructure. Red Hat's commitment to high performance computing is reflected in how it leads the resource management special interest group in Kubernetes, which ensures that organizations can deploy their payment services at scale with confidence. Red Hat also reduces the burden on developers who are creating cloud native applications through an integrated open source cloud development environment. To complement its technology offerings, Red Hat offers numerous support, training, and consulting services to its customers worldwide.



Real-Time Payments Enablement

Red Hat offers several services to organizations interested in enabling RTP capabilities within their product environment. Red Hat helps organizations establish and launch new payment schemes and also helps build support for adjacent product systems to process transactions in real time. Red Hat will enable clients to create new payment schemes quickly in the future, and will help organizations establish monetization policies that are easily adjustable against various payment routes and types.

Red Hat also offers services around cloud technology enablement within the realm of RTP functionality. These services include helping organizations transform their technology platforms to support cloud-native applications and microservice-based architectures, and enabling cloud computing within secure technical environments.

Implementation and Pricing

Red Hat Openshift pricing varies based on its feature bundles: Core, Plus, and Portfolio. Pricing is also based on a numeric model of nodes (systems, hosts, instances, virtual machines, containers, and devices) that organizations are managing, or optionally based on a consumption model.



About Level Research

Level Research, formerly PayStream Advisors, is a research and advisory firm that operates within the IT consulting company, Levvel. Level Research is focused on many areas of innovative technology, including business process automation, DevOps, emerging payment technologies, full-stack software development, mobile application development, cloud infrastructure, and content publishing automation. Level Research's team of experts provide targeted research content to address the changing technology and business process needs of competitive organizations across a range of verticals. In short, Level Research is dedicated to maximizing returns and minimizing risks associated with technology investment. Level Research's reports, white papers, webinars, and tools are available free of charge at www.levvel.io

DISCLAIMER

All Research Reports produced by Level Research are a collection of Level Research's professional opinions and are based on Level Research's reasonable efforts to compile and analyze, in Level Research's sole professional opinion, the best sources reasonably available to Level Research at any given time. Any opinions reflect Level Research's judgment at the time and are subject to change. Anyone using this report assumes sole responsibility for the selection and / or use of any and all content, research, publications, materials, work product or other item contained herein. As such Level Research does not make any warranties, express or implied, with respect to the content of this Report, including, without limitation, those of merchantability or fitness for a particular purpose. Level Research shall not be liable under any circumstances or under any theory of law for any direct, indirect, special, consequential or incidental damages, including without limitation, damages for lost profits, business failure or loss, arising out of use of the content of the Report, whether or not Level Research has been advised of the possibility of such damages and shall not be liable for any damages incurred arising as a result of reliance upon the content or any claim attributable to errors, omissions or other inaccuracies in the content or interpretations thereof.

