

**REG-9:**

AUTOMATING  
FOR HIGHER ROI,  
EFFICIENCY &  
RISK REDUCTION

corfinancial.

FROM

bitarisk.

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## 1. Introduction

Bank trust companies manage approximately US\$1.3 trillion in wealth management assets, representing around 10% of US assets under management.

Meanwhile, the market size, measured by revenue, of the Trusts and Estates industry in the US reached \$193.9 bn in 2020<sup>1</sup>, having grown by an average of 3.9% per year between 2015 and 2020<sup>2</sup>. It is a vast market, controlling a considerable amount of money. While growth in Registered Investment Advisors (RIAs) and other independent channels has been greater, bank trust companies remain a force to be reckoned with.

Bank trust portfolios are regulated by the OCC (Office of the Comptroller of the Currency), as opposed to the SEC (US Securities and Exchange Commission). Regulation 9, or REG-9, as it is commonly known, imposes a stringent set of checks on portfolio management. For portfolio managers working in bank trusts that do not have automation in place, performing these checks is a laborious, error-prone, and time-consuming task. This compliance activity, including reporting and approval workflow, is what bank trusts must seek to automate, to reduce costs, increase efficiency, and limit risks.

## 2. Operational challenges

The operational implications of REG-9 are significant and onerous. Bank trusts must certify that they have managed the trust portfolio in accordance with REG-9 checks throughout the year. These checks include both portfolio and administrative reviews, requiring the department to:

1. Audit trust portfolios to make sure that the assets are consistent with the stated investment objectives, including the set asset allocation. Additional checks may cover minimum bond quality, maximum asset weight, maximum issuer weight, maximum sector weights, exposure to non-marketable assets, and ensuring that all assets are on the company's recommended list.
2. Track portfolio investment performance and identify outliers.
3. Conduct administrative checks, ensuring and confirming that the Investment Policy Statement (IPS) and reporting setup are complete, fee variations are documented, and changes in key account characteristics during the year are recorded.

Where and when there are exceptions to these checks, the bank is required to have a process in place to accurately track and document them.

In order to comply with REG-9, companies must go through this process for every portfolio at least once a year. Most bank trusts manually assemble the required information from multiple sources and package the data into PDFs or spreadsheets before sending it on for review and approval. The approach to this annual requirement varies from one company to another as there is little standardized reporting.

<sup>1</sup> IBIS World, [Trusts & Estates in the US Market Size 2003–2026](#)

<sup>2</sup> Ibid

### 3. The potential for automation

The off-the-shelf software currently used by the bank trust account industry is fairly limited. Companies input reminders into the trust accounting system (reminders which pop up from time to time, whenever a deadline is reached), but there is no real automation involved in the process and very little workflow. At the end of the annual review, advisors have to combine disparate data from multiple files and certify it – again, manually. There is no genuine tracking mechanism underpinning this process.

**Doug Fritz, co-founder of F2 Strategy:** “REG-9 automation wasn’t a major topic in trust accounting circles even as recently as two years ago. As document signing, performance reporting and other processes have gone digital, however, the tide has gone out for these core operational tasks and it has exposed rocks that no one was aware of. REG-9 automation is one of those rocks.”

Automating REG-9 requirements could significantly improve this process in four ways:

1. **Automated daily tracking and exception management:** Automating the daily tracking of portfolios against all relevant portfolio construction checks and alerting to exceptions. These exceptions must then follow a workflow in order to document why and for how long they should be permitted. This includes an approval process, a complete audit trail, and business intelligence analysis. Exception management performed in this way ensures timely, accurate, and efficient processes.
2. **Automated tracking of performance metrics:** Typically, on a monthly basis, with alerts, exception management, and approval as above.
3. **Workflow administration checks** that provide a framework for reviewing the administration of a portfolio and declaring that it is in order and that any exceptions are well-documented.
4. **Automated data aggregation** that combines portfolio checks, exceptions history, and the current position into a consolidated report that can be checked before a workflow approval process, or auto-submitted if there are no exceptions during the review period.

In commercial terms, these four steps would remove the operational expense of senior portfolio managers and associates carrying out manual review tasks.

## 4. Managing exceptions

As indicated above, REG-9 compliance becomes a challenge when there is a good reason for the mandate to be breached for a particular transaction. Tracking anomalies is time-consuming for the advisor, the trust officer, and the support team around them who monitor and provide an audit trail. In most cases, exceptions become the rule.

For example, a trust beneficiary may ask a trust to raise \$4 million in cash for a property purchase by the trust. This might lead to a 10% weighting in cash, in violation of the IPS. The situation may only be temporary, but it has to be identified, recorded, recalled, and addressed during the annual review. This kind of scenario is a compliance officer's nightmare when there is no automated workflow to assist.

Commonly, it's 1% of transactions (such as the situation above) that cause 99% of the problems for bank trusts. The challenge of finding a way to record, manage, and report exceptions uniformly is what stands in the way of automation.

**Doug Fritz, co-founder of F2 Strategy:** "It is those small, nuanced situations that cause the most pain in complying with REG-9. These transactions would cause problems for any private client scenario, but with trust accounts, there are increased legal commitments, whereas if it was a RIA or other non-Regulation 9 relationship, the commitments would be easier to manage."

Naturally, the regulator will focus its attention on these "nuanced situations". Trusts are owned by banks and therefore are regulated by the OCC, which does not generally deal with investments. As a result, it scrutinizes these transactions with rigor.

## 5. A better model

There are five key stages in the automation process for trust companies:

1. Package the data
2. Track and manage any anomalies
3. Provide an audit trail and workflow
4. Deliver a management oversight dashboard with daily exception analysis
5. Generate a diarized annual review that includes information on exceptions during the review period; then send it through a digital review and approval process.

In this way, the data can be stored, reported on, and audited. One central person (usually the Chief Compliance Officer) has a complete overview of REG-9 compliance for every portfolio across the company and can identify any underlying issues. The central dashboard provides visibility of all the key metrics.

**Daryl Roxburgh, President and Global Head of BITA Risk:** “Automating REG-9 compliance gives bank trusts a significant competitive edge. Despite this opportunity, most bank trusts are currently relying on their own spreadsheet-based processes or limited vendor solutions, with a handful of the very large companies having developed their own proprietary, automated system.”

## 6. Smart investment

Trust accounts are generally a more expensive product for investors than the offering from brokerages and RIAs, for example; this is mainly because of the manual overhead required to service these relationships. Here increased efficiency through automation can play a significant role in strengthening a trust’s competitive advantage.

As difficult as it is to monitor REG-9 compliance, tracking how much time an advisor team devotes to the task is equally challenging. That is why Trust Banks respond so well to an automated solution. They know an enormous amount of time is being wasted, but lack the means to measure it.

The case for automating REG-9 is compelling when one considers the cost of investing in an application against that of senior employees spending hours on compliance rather than profitable, client-facing work. But time and efficiency are not the only gains; automation reduces risk and even has the potential to improve staff retention, as it eliminates repetitive elements of job roles.

We now see a groundswell of bank trusts interested in the REG-9 automation process. They are under pressure to deliver on this front from their clients, who expect a better digital experience, and from advisors and other team members, for the reasons outlined above. Today, it isn’t just a handful of large trust accounting companies that are seriously considering or have deployed some form of automation; small and medium-sized businesses are seeing the benefits of it, too.



## 7. Mitigating risk

An automated REG-9 process can be considered “always on” as it is continually checking and advising of breaches so that they can be managed, recorded in real time and later automatically packaged for the annual review.

This daily approach reduces risk, as well as the operational overhead. An automated system can track portfolio compliance at any given moment. This means that a bank trust’s risk reduces significantly as any anomalies will not remain hidden for months until the REG-9 review process begins. In the review period, the exceptions are automatically included in the annual certification of a trust fund, with the company stating that it has conducted the review, provided the documentation to the client, monitored the IPS, recorded all activities, and made good on all of its commitments.

To conclude, while automation leads to process optimization and ROI for trust accounting companies, risk reduction – mitigating the chances of missing a key event during the year – is just as valuable. When advisors rely on manual processes and retrieve data on-the-fly, inaccurate reporting on a portfolio, and thus being in breach of the regulation, becomes a very real threat to the company, from both a pecuniary and reputational perspective.

Above all, automation of a risk process is inherently wise.

## 8. Case study: A major US private banking and wealth management company

As part of our research into REG-9, we spoke to a senior executive at a major US private banking and wealth management company. Their process of reviewing client accounts (including trust accounts) makes for interesting reading.

- Determining the time spent on a review can be challenging. When the firm asked its advisors, they estimated that 20% of their time was spent on appraisals. Outside this company, technology vendors have suggested that more than 50% of advisors spend over 25% of their time performing assessments.
- The company has centralized the task of preparing investment reviews. Every month, a team of three staff processes 1/12 of the approximately 7,000 annual reviews. Roughly 70% of this team’s time is devoted to these reviews. Each review takes approximately 10 minutes to complete; most are a quick “open, click “approved” and close” process.
- Final review and answering the more complex questions are conducted by advisors and/or trustees, but the majority of the work is undertaken by the operations team, which consists of recent college graduates. The company believes there is a real opportunity to improve the procedure through batch processing, automated break approvals, and machine learning.
- While the company conducts each regulated review only once per year, the process of regular assessments to identify any drift from the IPS targets, holding of uncovered positions, and so on, is conducted through the portfolio management platform. It is then evaluated by the centralized team responsible for trading. The company does not see much value in its compliance team performing more frequent appraisals (although they admit this would reduce the time required per account during the annual review).
- The above point is an interesting one to consider: Who should “own” this task and where is the line between a portfolio management solution and a compliance/risk management solution? The answer will depend on how the organization has decided to structure its teams, roles, and responsibilities.
- The REG-9 portion of the evaluation (answering a series of questions related to the oversight of the trust account) is conducted outside of the operations team. The given examinations are performed by one of the company’s trust officers assigned to the account. This review typically covers around 15 questions and takes an hour.

**Daryl Roxburgh, President and Global Head of BITA Risk:** “When we first showed our solution to the Head of REG-9 Governance at a major US trust company, her response was: “This may sound quite nerdy, but this is really exciting!” What she was most excited about was the level of automation, the user interface, and the slick process.”



## 9. BITA Wealth solution for REG-9 automation

BITA Wealth delivers an efficient, demonstrable, and auditable process across all clients, provided through modular components that integrate with CRM and front-office systems. The solution

- automates pre- and post-trade checking of the key REG-9 requirements;
- systematizes approval workflow for all rules;
- automates the annual review report production with diarized reminders and checks.

BITA Wealth offers an integrated REG-9 workflow, bringing portfolio holding data through on a nightly basis and checking the portfolio against REG-9 rules and reporting exceptions. You know where you are compliant and where there are exceptions that can then be **monitored, reported, documented, and resolved**.

Rather than just running REG-9 checks at the annual review, this process raises issues when they occur, thus enabling early resolution and ensuring continuous compliance.

The BITA Wealth solution for REG-9 automation delivers an efficient process because only exceptions are reported and, unlike period reviews, there is no need to go back through history to understand the issue, since exceptions are reported the next day. False positives are avoided through the “almost outlier” status, which also reports how many days the portfolio has been an outlier.

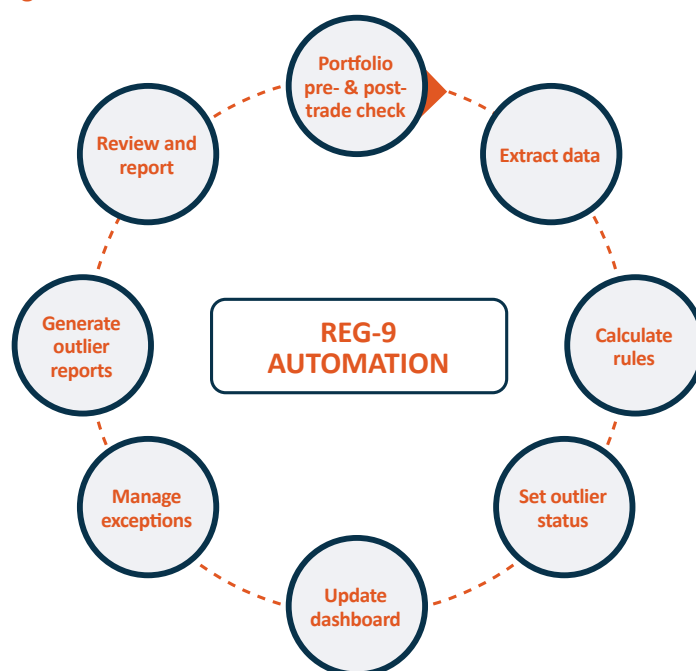
Our REG-9 solution is broken down into four key elements, which are integrated with the bank’s book of record and can be deployed independently based on requirements:

### 9.1 Post-trade REG-9 rules, checks, and exception management

Portfolios are checked nightly against the rules and exceptions reported to the user interactive dashboard. The on-screen list of outliers for any rule can be worked through by the user as they review each portfolio. The user can then either model the portfolio back into line or request that a “Known Exception” be applied for a period of time through the fully documented approval process.

As in the case of the full suite of business intelligence reports, the manager sees their own accounts on the dashboard and compliance sees the company’s.

BITA Wealth supports a full set of REG-9 rule checks (as listed in the diagram), together with additional ones such as performance, risk, and yield.



#### PORFOLIO REG-9 CHECKS

Allocation

Performance

Bond quality

Yield

Cash, issue and illiquid weights

Risk

#### HOLDING REG-9 CHECKS

Non-approved holdings

Bond quality

## 9.2 REG-9 review reports

The BITA Wealth REG-9 solution automates much of the annual review process. Thanks to automated daily checks, when the review report is run the data is already there- exceptions are resolved and approvals recorded. Alerts on the dashboard indicate when an annual report is due or overdue.

The report brings together the current portfolio with full analysis, REG-9 rule checks, and statements regarding any exceptions recorded during the ongoing monitoring. The typical report elements are illustrated below:

ACCOUNT	MANAGERS COMMENTS	ALLOCATION	TOP 5	EXCEPTIONS	ALLOCATION
Number	Free Text comments at key points within the report. Comments are stored within the report	Overall	Sectors	Rule	Weights
Name		vs Target	Holdings	Deviation	Pie chart
Contacts		Deviations		Rationale	
ACCOUNT SUMMARY	TOP 10 HOLDINGS	HOLDING LIST BY CLASS		OPTIONS	
Total value	Cost	Income \$	Cost	Income \$	Risk analysis
Unrealized gain / loss	Value	Yeild %	Value	Yeild %	Performance analysis
Annual income	Gain / loss	(risk)	Gain / loss	(risk)	Mandate / IPS information

The report can optionally include BITA Risk's advanced portfolio risk analytics, performance data and information on the IPS/Mandate. The report runs in seconds at the desktop and it output either as a secure or editable PDF.

## 9.3 Pre-trade REG-9 rule checks (optional)

In addition to the daily post-trade checks, all the rules can be checked pre-trade through the portfolio modeling screen. Dials, charts, and thermometers visualize the key metrics, setting them against their permitted ranges and giving the manager a rapid overview of the impact of any trade on or prior to executing it.

## 9.4 IPS and Mandate generation (optional)

For REG-9 automation, BITA Wealth will receive information on portfolio mandate/IPS from the company's client relations management (CRM) system. If a company does not have a digital mandate system, or if it captures limited data electronically, BITA Wealth can provide a solution for data augmentation or full profiling.

## Advantages of BITA Wealth REG-9 automation

Key benefits:

- ✓ **Automation** of rule checking and report production
- ✓ **Continuous compliance** checks on all portfolios with exception reporting
- ✓ **Approval workflow** with full audit trail
- ✓ **Post- and pre-trade checks** are available
- ✓ **Efficiency:** Manager and compliance share the same system and data
- ✓ **Diarized report production** with a countdown and alerts for overdue reports
- ✓ **Reduced manual checking**
- ✓ **Central business intelligence** reports for enterprise oversight
- ✓ **Risk** Option to add ex-ante portfolio risk management and oversight

## 10. Conclusion

The lack of standardized reporting and, above all, automation imposes a high cost on the \$193.9 billion Trusts and Estates industry in the US. Regulation 9 subjects bank trusts to a stringent set of portfolio checks, ranging from administrative to portfolio management tasks.

Despite the fact that entire teams spend as much as 70% of their time on annual reports and highly paid advisors dedicate an average of 20-25% of their hours to assessments rather than client work, the execution of REG-9 checks has remained predominantly manual to this day. Only a handful of very large companies have developed their own proprietary, automated systems.

There is a long history of “how things are done”, which has created a certain stigma around what’s possible and optimal when it comes to compliance. Yet, state-of-the-art software that automates daily tracking and exception management, performance metrics, data aggregation, and workflow administration checks can make a critical difference.

In terms of ROI, this means

- ✓ Time-saving
- ✓ Process minimization
- ✓ Cost reduction
- ✓ Efficiency gain
- ✓ Risk reduction
- ✓ Employee retention

As companies strive to accommodate their clients’ and employees’ growing expectations for a more streamlined and effective digital experience, the interest in solutions offering such functionality is rapidly increasing. REG-9 automation is a powerful step in this direction and will help companies maintain competitive advantage in the years to come.



**Doug Fritz** is the founder & CEO of F2 Strategy, a leading boutique consulting firm helping complex wealth management firms improve their technical capabilities across the entire client and advisor experience. An accomplished veteran wealth CTO, Doug leads a team of experts in frictionless operations, digital client engagement, performance, and accounting systems selection and implementation, among many other areas for clients. Doug is widely acknowledged as an industry thought-leader. He is a speaker and judge at In|Vest, American Banker, Financial Times, WM.com, RIAIntel, InvestmentNews, Family Wealth Report, and Financial Planning.



**Daryl Roxburgh** is President and Global Head of BITA Risk- part of corfinancial, a leading provider of specialist financial software solutions and advisory services to organizations globally, headquartered in London, with offices in Boston and New York. Daryl has over 30 years of investment industry experience. He sits on the PIMFA Indices Committee, was a founding director of the London Quant Group, and has contributed to a number of investment books.



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## about corfinancial

**corfinancial** provides software solutions and advisory services to banking and financial services organisations worldwide. The firm has offices in London, New York and Boston.

There are five key problem areas corfinancial looks to solve through its primary software and service offerings:

**BITA Risk** provides end-to-end private client suitability, portfolio management, risk, ESG and monitoring oversight solutions; brought together in BITA Wealth to mirror and systemise the investment process of wealth managers and private banks and available individually for CIO and investment teams.

**SureVu** empowers buy- and sell-side firms to efficiently monitor and track security trades throughout the settlement lifecycle, enabling users to proactively manage and oversee settlement exposure.

**salerio** is a post-trade processing solution that enables asset managers, hedge fund managers and securities/fund services firms to automate the flow of securities and treasury trades from matching through settlement.

**costars** is an investment administration platform for third party administrators, fund supermarkets and wealth management companies.

**paragon** is a comprehensive front-to-back office fixed income portfolio accounting, processing and reporting solution for banks.

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Automates the flow of securities and treasury trades from matching through to settlement.

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Retail fund/transfer agency solution providing end-to-end administration for collective investments.

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