

# Virtual Accounts – Enabling lean treasuries

Banks should offer Virtual Accounts Management system that simplifies and transforms corporate treasury landscape

June, 2020 | Version 14.4 Copyright © 2020, Oracle and/or its affiliates

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### **ABSTRACT**

Corporate treasurers across the globe have always chased an elusive idea of having an absolute control and visibility over corporate funds. As corporate enterprises become more large and complex, treasurers face increased challenges when it comes to getting a consolidated view of their funds and deploying them in an efficient manner. Facing a general credit squeeze, tighter liquidity and increasing cost of funds, treasurers today are under immense pressure to make the best use of available corporate funds and increase operational efficiency. Therefore, treasurers tend to employ various strategies towards concentrating the entire cash in one place and centralizing their corporate payables / receivables processing. This is easier said than done, given the imperfections associated with conventional cash management tools. Hence the treasurer's search for a magic wand continues.

Treasurers are compelling their banks to offer innovative solutions in the areas of working capital optimization, efficient liquidity management, automated receivables / payables management, and client money segregation. The entry of digital technologies into the banking space has raised customer expectations to an all-time high. Banks are also under tremendous pressure to ward off the increasing power play of Fintechs encroaching into areas that were previously the stronghold of banks.

Meanwhile, Corporates continue to have an intrinsic demand for an efficient and real time fund management process, with fund flows mimicking their organizational structure. But every corporate has a unique internal structure and hence one-size-fits-all approach will only add more entropy to an already complex corporate fund management process. In this scenario, "Virtual Account" can play an important role by becoming a strategic enabler for both banks and corporates. Virtual Accounts with their inherent flexibility can help create and manage fund flow hierarchies, tailormade as per the needs of the corporates.

This paper explores how a Virtual Accounts Management System can be an ideal solution to transform the corporate treasury by addressing the real time liquidity needs, streamlining payables & receivables, and segregating funds across different entities. We delve into the future of Virtual Accounts keeping in mind emerging technological trends. We also evaluate various implementation strategies for a Virtual Accounts Management solution.

### INTRODUCTION

Virtual accounts are a set of non-real accounts used to make and receive payments on behalf of a real account. In other words, virtual accounts are used for redirecting transactions to the underlying real account. By virtue of these accounts being non-real in nature, they are treated as off-balance-sheet items from a bank's perspective. Multiple virtual accounts for a corporate can be opened and mapped to a single real account of the corporate. This would automatically re-direct the funds received on a virtual account to the underlying real account on a real time basis.

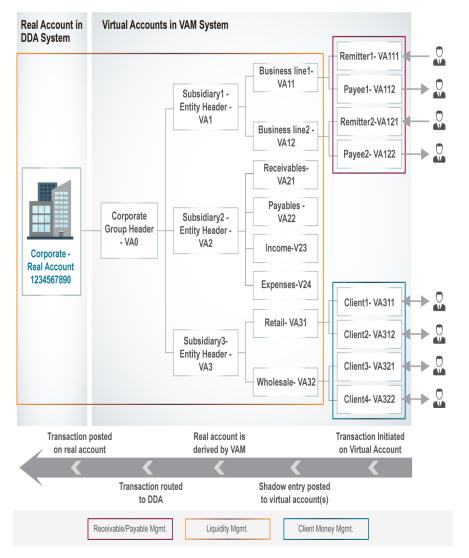


Figure 1. Schematic representation of a typical Virtual Account structure & transaction flow

A single-level or multi-level hierarchical virtual account structure can be created based on underlying business requirements. A transaction performed on any virtual account is routed automatically through the hierarchy up to the real account on a real time basis. Concurrently, shadow entries are posted to the respective virtual accounts on which transactions have been initiated. If required, Virtual Accounts can be setup to hold shadow balances to virtually segregate the physical balance in the underlying real account. This ensures consolidation of corporate funds across multiple accounts and at the same time, segregation of individual contributions virtually.

A Virtual Account structure can be quite liberating for the treasurer. It allows for the setup of a flexible structure where corporates can create and assign separate virtual accounts based on their reconciliation and fund segregation needs. Transactions can be tracked directly for each of the virtual accounts from which they are originated. This allows corporates to easily identify the source of a transaction helping them automate time consuming and error prone reconciliation processes.

With actual movement of funds routed from / to a single real account, corporates can perform their operations by maintaining a single banking account. Virtual accounts

Multiple virtual accounts (VAs) can be created and linked to a single real account of a given corporate. VAs can be used to make and receive payments on behalf of the real account.

A single-level or multi-level hierarchical VA structure can be created based on underlying business requirements. Transactions performed on any VA are routed automatically through the hierarchy up to the real account.

also have a strong self-service orientation giving corporates the built-to-suit flexibility to structure complex account hierarchies. With the right hierarchical setup of a virtual account structure, both banks and corporates benefit from reduced costs and increased efficiency.

### **KEY BUSINESS APPLICATION AREAS**

Virtual accounts as a concept has evolved significantly from being a modest reconciliation tool for corporate receivables to an all-powerful corporate liquidity / cash management solution. Corporates are realizing how virtual accounts can be leveraged to setup account structures mimicking an in-house bank or a centralized payment factory. Corporates handling client money have found virtual accounts to be an efficient tool for segregating their clients' money.

Implementation of virtual accounts to streamline different business processes and minimize operational overheads is a trend that is gaining popularity among corporates. This adoption is primarily because virtual account has got something to offer to corporates of all sizes, be it an SME, a mid-size corporate, or a global conglomerate. Virtual accounts being an extremely flexible tool can be tailored to address a disparate set of business challenges that the corporate treasurer faces today.

Three major areas where virtual accounts offer great value proposition are:

- Receivables / Payables Management
- Corporate Liquidity Management
- Segregated Client Money Management

**Receivables / Payables Management** 

One of the foremost usages of virtual accounts is to manage and streamline corporate receivables through virtual account hierarchy setup. In this setup, rather than using a single generic physical account for managing remittances from all the remitters, a unique virtual account is allocated to each remitter. This makes the receivables reconciliation process more efficient for the corporate as the remitter can be reliably identified from the remittance transaction itself.

On the payables side, virtual accounts offer a cost-efficient way of tagging payments to a specific business unit or cost center inside a corporate. Virtual accounts can be allocated to the most granular level units of the corporate which helps in correctly identifying the paying unit for a payment transaction even though the actual funds are debited from the underlying real account.

Virtual accounts offer the capability of centralizing funds by redirecting receivables and payables to the underlying real account. At the same point in time, it allows for funds to be notionally segregated at the virtual accounts level through shadow transaction postings. By leveraging the above capabilities, large corporate houses with multiple subsidiaries and business entities can consolidate their receivables and payables management operations through centralized virtual OBO (On Behalf of) structures. A multi-level, multi-entity hierarchical POBO (Payment on Behalf of) and ROBO (Receipt on Behalf of) structure operated with a single underlying real account offers a compelling value proposition to the corporate.

A multi-currency virtual POBO / ROBO structure can significantly benefit global corporates operating in multiple geographies and in multiple currencies. Such a structure can be backed by multi-currency or single currency real account. In the scenario of a single currency real account, virtual accounts are opened in local

Virtual Accounts with its "build-to-suit" open structure offers benefits to corporates of all sizes towards optimizing their fund management. Businesses can have reduced overheads by maintaining minimal number of real accounts and not worry about fund availability across all real accounts. Options to mimic in-house bank or implement centralized payment factory provides a greater control for large corporates in their operations.

A multi-currency virtual POBO / ROBO structure can operate in multiple geographies and in multiple currencies backed by a multi-currency or single currency real account.

currencies across geographies and the transactions posted to these virtual accounts are converted using a configurable exchange rate and redirected to the said real account.

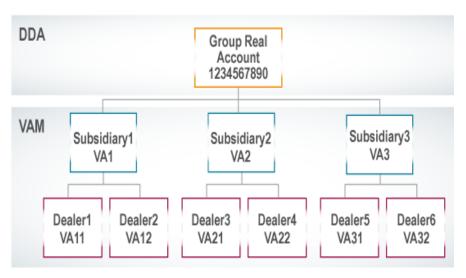


Figure 2. A typical ROBO Structure

## **Corporate Liquidity Management**

As a result of the general credit squeeze and an ever increasing expectation of keeping the treasury lean and efficient, the focus of the treasurer is back on real time centralization of corporate cash. Traditional liquidity management tools like cash concentration and notional pooling have their own shortcomings in terms of efficiency. Furthermore, regulators tend to scrutinize these tools very closely. In such a scenario, virtual accounts offer a complementary solution in the form of virtual cash pooling to better manage corporate liquidity.

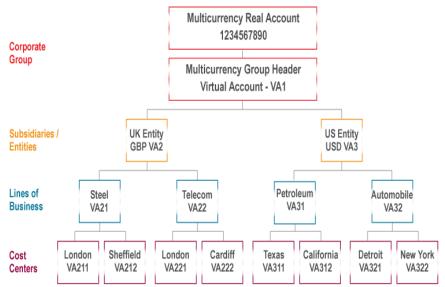


Figure 3. Multi-currency Multi-Entity Liquidity Structure

A virtual cash pool is a multi-level structure where the entity level accounts and subaccounts are created as virtual accounts. The structure is usually backed by a single physical account where the entire cash is concentrated on a real-time basis. The shadow balance at each virtual account tracks the entity / sub-entities' cash position. Hence, corporate cash is always centralized on a real time basis, and at any given point of time the same is virtually segregated at individual virtual account level, providing a comprehensive view of the cash across the organization.

Multi-currency, multi-entity virtual account structure is specifically beneficial for a global corporate operating across multiple geographies and dealing in multiple currencies. A multi-currency virtual account structure is generally backed by a physical multi-currency account which holds balances in multiple currencies. Additionally, a balance compensation feature which considers balance across all the currencies of the multicurrency real account ensures balances are fungible. In case a corporate does not wish to hold balances in multiple currencies, virtual accounts can be opened in local currencies and transactions posted to these virtual accounts can be converted using prevailing exchange rates and redirected to the underlying real account.

In a multi-entity virtual account structure, controls can be placed on balance contributions and funds availability at each entity level. Internal credit limits and sublimits can be assigned to entities, subsidiaries, business-units etc. on their respective virtual accounts in the structure. Fund movements between entities can be tracked as inter-company loans and interest rates based on the corporate's transfer pricing methodology can be configured. Based on the balance contribution of each virtual account in the structure, interest re-distribution rules can also be implemented.

In a scenario, where country specific regulations mandate corporates to hold at least one physical account in the country, a hybrid liquidity structure can be implemented. This structure consists of virtual accounts concentrating cash to a real account at the country level and a physical pooling / notional pooling structure across country level real accounts, thus achieving the objective of funds concentration into a single real account.

# **Segregated Client Money Management**

Client money management is another area where virtual accounts have gained prominence. For Segregated Client Money Management, corporates create unique virtual accounts for each of their clients or customers. These virtual accounts allow corporates to track payments from and to a given client. Through shadow accounting and shadow balance tracking at the virtual account level, corporates can segregate their clients' money notionally whereas the funds are always centralized in the real account of the corporate.

Businesses handling client money, like Pension Funds, Public Offers, Mutual Funds subscription, Property Management firms, Solicitor firms, Co-operative societies, Apartment / Building maintenance, etc. are adopting virtual accounts solutions for effectively managing their clients' money. Banks offering escrow management services are now considering replacement of existing physical escrow accounts with virtual accounts. Non-banking financial-institutions are exploring to leverage virtual accounts for managing their client money along with providing features like overdraft facilities, credit and debit interest calculation setups etc. on virtual accounts.

Within the group, any inter-company loans can be tracked and interest rates configured. Interest redistribution rules can be implemented for efficient accounting.

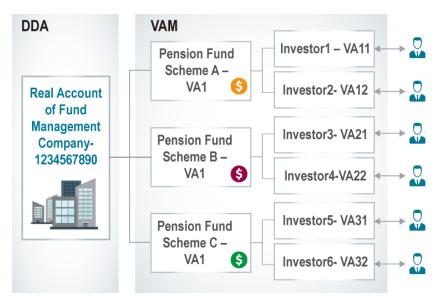


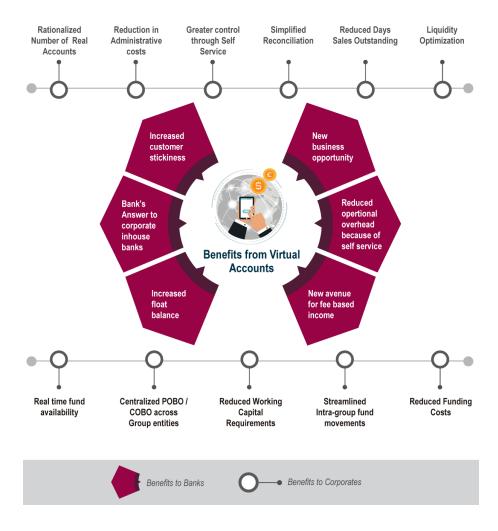
Figure 4. Client Money Management - Pension Funds

The adoption of virtual accounts by these institutions in the area of segregation and management of client money is essentially driven by ease of implementation and cost effectiveness of such an offering by their banks, rather than having an in-house solution.

### **BENEFITS**

Virtual Accounts are highly flexible and can be incorporated into a corporate treasury of any size. Virtual accounts provide self-service tools to a corporate to structure and streamline existing complex physical bank accounts, data gathering for reports and accounting to achieve a lean treasury with the sole objective of doing more with less.

The built in flexibility provided by virtual accounts provide a wonderful opportunity for corporates to restructure their ledger and sub-ledgers in case of any organizational shakeup, regulatory changes or business environment without having to undertake massive revamp of their banking accounts.



### **FUTURE OF VIRTUAL ACCOUNTS**

For corporates, the current virtual accounts solution offered by banks aids in consolidation of funds within the same bank. However, corporates generally maintain accounts in multiple banks for various reasons. Hence, issues related to centralization and visibility of funds are minimized to some extent but are not eliminated completely.

The banking industry is moving towards 'Open Banking' or API based banking, In Europe particularly; the new PSD2 directives have been implemented. Also, immediate payments have gained prominence worldwide. With these developments, we believe that the above issues currently faced by corporates can be eliminated and a 'True' consolidation of funds across banks is achievable using a 'multi-bank' virtual account structure.

Using open APIs / Immediate Payments real time transactions between banks can be performed. Hence multi-bank VA is a possibility in the immediate future.

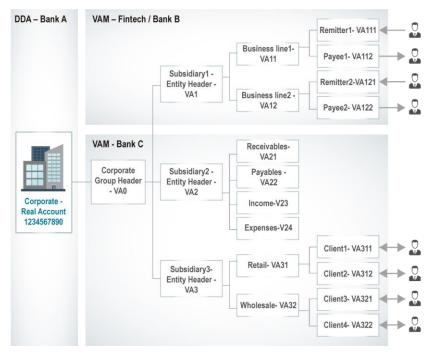


Figure 5. Schematic representation of Multibank Virtual Account Structure

Real Account can be in a completely different bank to that of the Virtual Account Structures.

VAM Structure can be set up as a hierarchical structure across multiple banks / Fintechs.

API banking will enable banks to offer virtual account facility to corporates without having the need to maintain a real account in the same bank. Hence, a corporate can maintain a single real account in a given bank and multiple virtual accounts in various banks all linked to the same real account. This may become the elusive magic wand that the corporate treasurer has been chasing all along!

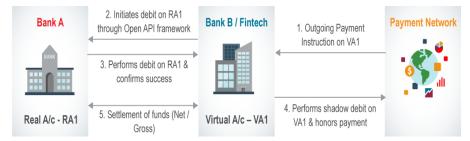


Figure 6. Envisaged transaction flow for Outgoing Payments in a multi-bank Virtual account setup

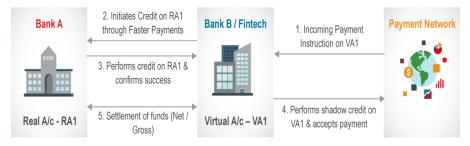


Figure 7. Envisaged transaction flow for Incoming Payments in a multi-bank Virtual account setup

This opens up a new business opportunity for Banks / Non-banking Financial Institutions / Fintechs to offer virtual account management facility as a pure fee based service by having only virtual accounts with them.

### IMPLEMENTATION CONSIDERATIONS

Banks have realized that virtual accounts can generate a lot of fee based income and their technology teams are weighing various options to implement and integrate virtual account management solutions:

**Tweak existing applications:** Virtual account functionality can be built within the Banks' existing DDAs, payment systems etc. based on the assumption that virtual accounts are very similar to real accounts. These systems are not designed to handle the "virtual" nature of accounts and may come with a host of limitations, though this approach may seem to be cost effective. At times, this approach has an inherent risk of destabilizing the existing application and the functionalities offered therein. Also, as the number of virtual accounts can be huge, the scalability and performance of the existing application may be compromised.

**Build New In-house Application:** Alternatively, virtual account management system can be developed as a new in-house application. This could be more comprehensive than extending the existing systems. However, from a time-to-market perspective, this may pose a challenge because of the time required for the complete development cycle. Additionally, this might not be a comprehensive solution to meet the wide ranging needs of corporates of various sizes.

**Buy Standalone Market Ready Application:** There are few niche applications available in the market providing comprehensive virtual accounts management solution. These solutions normally fit well into the bank's system landscape and require minimal changes to existing applications. Also, as these are market ready applications, the time-to-market for launching virtual account product offering by banks are significantly lower compared to the other approaches.

Another area to be considered during decision making is the corporate self-service capability, as it is one of the major components without which the full benefits of virtual account can't be derived. Banks may think of offering the self-service facility through their existing corporate internet banking portal which can leverage the APIs provided by VAM system in the background. For larger corporates, a host to host ERP integration can be looked at considering the automation aspect.

In our view, since Virtual Account Management is complex in nature and continuously evolving with a host of regulatory changes being expected into the VAM orbit, banks can future proof themselves by implementing a standalone comprehensive solution that can be integrated with their existing applications. These applications are generally developed to meet the current market requirements and are continuously investing in their research and development by envisaging future trends. These applications are expected to come with their in-built APIs which can be used for offering custom-made self-service portals or can be used for corporate ERP integrations.

By implementing Standalone Market Ready Comprehensive Self-service application with ability to scale horizontally & vertically banks can truly realize the potential of virtual account offering to their customers.

Regulations related to KYC, AML, and Risk management processes are still evolving for Virtual Accounts. Hence, banks have to consider the applicable regulations while offering virtual account management services. A vendor with niche experience in the virtual account domain can help banks remain compliant.

### **CLOSING THOUGHTS**

Virtual Accounts enable a leaner and efficient corporate treasury by cutting down the flab in terms of:

- Rationalization of the number of real accounts
- Optimization of human resources involved in AR / AP activities in multiple geographies / group companies
- Elimination of manual reconciliation efforts
- Reduction in quantum of working capital needs.

Way back in 1994, Bill Gates quoted "Banking is necessary, but banks are not".

This statement is all the more relevant in the current business environment. With rapid advancement in technology, pressure from Fintechs, introduction of open banking framework, increased compliance needs, there is a dramatic increase in customer expectations. Banks have to constantly evolve themselves to stay relevant and provide more value to their customers.

The quality of the virtual account management platform is the key driver to leverage the benefits associated with virtual accounts. An integrated platform built on the latest technologies and scalable open architecture that encompasses a global virtual account network across multiple banks and allows seamless movement of funds across all these accounts provides a great value proposition for both banks and corporates.

# **APPENDIX**

# Glossary

VAM	Virtual Account Management
DDA	Demand Deposit Account
ОВО	On behalf of
ROBO	Recievables on behalf of
СОВО	Collections on behalf of
РОВО	Payables on behalf of
API	Application Programming Interface
SME	Small and Medium Enterprise
КҮС	Know your customer
DSO	Days Sales Outstanding
PSD2	Revised Payment Service Directive
AR	Accounts Recievables
AP	Accounts Payable
ERP	Enterprise Resource Planning
AML	Anti-Money Laundering

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