

Top 50 Dispatcher Work Order Routing Process Provide Blockchain Security of Supply Line Connections Tracking Activities

7/23/2017

We have identified Equipment upgrade/repair simulation process rules defining what information is to be routed and to what installation DoD has tasked for missions. For example, dispatchers can set up rules defining enabling conditions instances work orders must meet before equipment upgrade/repair simulation processes advance automated work order prompts to the next tracking activity in the logistics process. Also, rules governing installation receipts of priority approval requests must be based on key commitment criteria.

Dispatchers have promoted use of logistics account flash routing rules for supply lines to split traffic up according to any Equipment Spec required in order to perform the kind of work orders present in upgrade/repair simulation Requests. Scheduling such a routing solution is only way DoD dispatchers can possibly cope w/ administration of multiple applications, per installation instructions.

Dispatchers can review logistics information about the specific DoD mission tasks associated w/ the supply line, resource requirements, and so on. For example, dispatchers can route summary & detail status information for work orders by installation.

If someone told you that the technology underpinning Bitcoin will likely revolutionise much of the way we do business in the next ten years, you might shrug it off. Navy would like to tell you it's just the beginning, and that it might also revolutionise Naval 3-D Printing, fiscal business processes, and the entire discipline of logistics, and that's only scratching the surface.

A blockchain is a shared, distributed, secure supply line connection monitor that every participant on service routes can share, but that no one entity control. In other words, a blockchain is a supply line connection monitor that stores work order routing records. The routing intersection is shared by group of service route supplier participants, all of whom can submit new records for inclusion.

However, those records are only added to the supply line connection monitor based on the agreement, or consensus, of a majority of the supplier group. Additionally, once the records are entered, they can never be changed or erased. In sum, blockchains record and secure route dispatch information in such a way that it becomes the group's agreed-upon record of important contract terms and enabling conditions.

Smart contracts can be instantly/securely sent and received reducing exposure/delays in back office dispatching. As an example, oversight of Purchase Requests could be securely implemented with greater transparency and also potential battlefield applications messaging system could be leveraged during instances in which troops are attempt to communicate back to

HQ using secure, efficient and timely logistics system.

Aircraft Readiness Blockchain offers all parties in entire supply line to update and share routing assets across the system. All aircraft parts are tracked through the design/service life of the aircraft and smart contracts are used to facilitate maintenance and repair of damaged parts keep track of their aircraft part suppliers as part of the quality assurance processes. Before Blockchain, outdated maintenance repair and operations systems used to track the parts operated in vertically separated units with limited communication potential, posing challenges in tracking and providing a unified, single source of readiness associated with each part.

As a general example, we consider a contract awarded to a prime contractor for the production of a complex electronic system. The prime contractor will have subcontractors, and subcontractors to subcontractors. Upon approval to start work, the prime and subcontractors will be assigned intersections on common blockchain route to influence quality of service Every value-adding activity by the prime or by a sub will be required to be annotated as events on the blockchain – such events could be the build, testing, or delivery of a component.

Route Service will only be rendered from a prime to a subcontractor, or a subcontractor to another subcontractor, when the value-adding activity is annotated by dispatchers in a timely and accurate manner on the blockchain with the effect not only of ensuring accurate recordkeeping, but also encouraging timely subcontractor service. In this manner, the supply line connection monitor for even a single spare part component can be fully mapped out via service sequence of large number of subcontractors involved in the build process.

DoD programmes have begun enacting improvements in mission requirement definition but seem to be only partway toward the route-based concepts assigned by the application design. It is still necessary for dispatchers to do a great deal of work to administer individual logistics devices. Application designers would like to see something that advances at least one more level on the Supply Line.

Dispatchers can set up equipment categorisation series by creating sequentially constrained sourcing subroutines so one logistics process calls another on the supply line. This procedure is especially useful to DoD operations when dispatchers need to reuse spare parts-specific components within other processes.

For example, the initial equipment upgrade/repair simulation process for work orders determines the logistics account flash type of the work order & calls other processes utilised by DoD that are based on account flashes, such as the process to determine the work order type. The essence of the blockchain solution to supply line connection security monitor is the unification of all the transactional activities that constitute a supply line intersection into a single work space so that visibility of routing intersection transactions can be improved.

Blockchain is an emerging technology for decentralised and transactional supply line connection monitor sharing across a large group of supplier intersections. It enables new forms of distributed supply line connection monitor architectures, where agreement on shared states can be established without trusting a central integration point. A major difficulty for architects

designing applications based on blockchain is that the technology has many configurations and variants. Since blockchains are at an early stage, there are limited number of product support success stories or reliable technology evaluation available to compare different blockchains.

The potential of blockchain technology lies in exploiting and extending supply line connection monitor. The technology can connect suppliers that were not previously connected, enable new forms of collaboration and create new opportunities for interaction. In logistics, blockchain has the potential to transform and disrupt processes by documenting, validating and securing each intersection event in the supply line connection monitor. Promising applications of blockchain already exist in logistics and many other applications and supplier models will emerge as the technology matures.

Imagine what logistics processes are required DoD force structure scenario containing multiple installation routers & sourcing ticket intersections. Dispatchers should be able to define a single set of rules for permitted traffic, denied traffic, permitted/denied sources & destination.

Product traceability and Logistics process automation through smart contracts represent some of the most promising blockchain implementations for supply line connection monitor. However, these applications need different enabling conditions in terms of large-scale implementation by supplier dispatch events and the time-frame for this implementation is also expected to differ from case to case.

In the future blockchain routing applications may have the potential to be able to parse information into subsets & distribute logistics information to the automated attendant designated by DoD. Dispatchers should not have to examine each sourcing ticket intersection individually.

Built-in supplier incentives to assure the security of every transaction and asset in the blockchain allows routing technology at intersections to be used not only for transactions, but as a product registry system for recording, tracking and monitoring all assets across multiple value suppliers. This secure information can range from information about parts or contract work-in-progress such as product specifications and purchase orders.

Because blockchain is based on shared consensus among different suppliers, the information on the blockchain is reliable. Over time, suppliers build up a reputation on the blockchain which demonstrates their credibility to one another. Furthermore, because trust can be established by the supply line connections, third party monitor of routing intersections between two suppliers will no longer be necessary.

In order to establish sufficient trust to become involved in a blockchain supply line connection monitor, the motives and goals of the involved suppliers must be clear. The reputation of the participants becomes transparent and grows over time. It is important that suppliers in the routing market space can trust each other in order to share information and increase efficiency in shared processes.

Routes define the path along which equipment upgrade/repair processes move a work order. Depending on installation logistics requirements submitted by DoD, routes can be relatively

simple & sequential, or increasingly complex, with joins or splits, parallel routing, iterative routing, loops and so on.

The route tracker application uses scripted enabling condition evaluations determining the next logistics activity based on information dispatchers set up in spare parts-specific attribute structures, such as work order status & DoD recipient rules determining account flash routing to installations.

As with routes, dispatchers determine the complexity of rules according to the requirements of installations. For example, DoD logistics considerations can set up work orders to progress to the next step only when predefined supply line threshold values have been met.

Blockchains enable the creation of intelligent, embedded and trusted programme supply line connection monitor, letting suppliers build terms, conditions and other logistics parameters into contracts and other transactions. It allows suppliers to automatically monitor agreed upon value figures, delivery times and other enabling conditions, and automatically negotiate and complete transactions in real time. This impacts cost/benefit of work orders, maximises efficiency and allows for multiple avenues leading to supply line connection monitor.

It also opens the door for machine-to-machine transaction capabilities enable the transformation of a traditional supply line connection, where work order transactions and contracts must be maintained by each dispatcher interaction with suppliers. With blockchain technology, all transactional elements are stored on decentralised supply line connection monitor by multiple suppliers.

Dispatchers can review, approve, or reject work orders. After a work order is created, route tracker applications send logistics account flashes to notify DoD installations responsible for reviewing & approving the work order. When dispatchers approve a work order, the route tracker application then sends an account flash to the next installation on the work order approval route.

During the work order approval process, the route tracker application generates logistics report records for DoD user-based approvals & rejections that have been composed upon comparison to template work orders run with supplier capacity plans.

If work orders are rejected, the route tracker application sends logistics account flash back to the originator of the work order. Reminder Sets provided to DoD divisions trigger Scheduling Equipment Workbench programme functions reviewing account flashes & provide the ability to cross-reference spare parts-specific components.

If dispatchers must reject a work order DoD has proposed after initially approving it, the route tracker application creates logistics report records for the rejection & stores the original approval record for supply line connection review. Supply line report records are used to review spare parts-specific information & schedules about the work orders that dispatchers group into routing specifications. By projecting supply line connection events onto a common monitor, dispatchers will have a homogeneous, detailed, and real-time graph of work orders and supplier relationships, but also a large baseline contract grouping of typical supply line connection

monitor as well.

With such graphs, the full power of routing error detection methods from machine learning and artificial intelligence can be brought to bear on the scale of the problem. This may speed the time-to-detection of supply connection disruption, and even deter some attempts outright, as the probability of non-detection is diminished.

As supply line connection monitor graphs are constructed for all components that comprise a device, and all devices that comprise systems, a uniform supply line connection monitor is constructed for the entire item resolvable to any level of precision required for dispatcher review.

The sourcing ticket intersections, routers & switches designed for DoD must be viewed as one logistics device. If a single intersection is in a portion of the supply line connection that never sees a given range of traffic, then it doesn't need the applicable rules & dispatchers at Sourcing ticket Station should figure that out & not push the issue as an absolute requirement for Logistics simulations.

There are significant limitations to a blockchain-based approach to supply line connection security, and we do not propose it as a fully comprehensive solution by itself. The fundamental problems not addressed directly by the blockchain are twofold. First, the blockchain solution is optimised toward assessing transactions rather than behaviour of dispatchers, whatever their affiliation.

Second, the blockchain only provides an economical and secure supply line connection monitor for measurements, but for supply line connection review to be useful, there must still be a critical density and volume of high-quality measurements of intersecting events.

While the blockchain will provide an economical, secure, and uniform supply line connection monitor to record such events, the forensics enabled by the blockchain are ideally suited to identifying enterprise-level behavioral patterns and relationships.

Blockchain solutions will not entirely substitute for sound vetting procedures and supply line connection activity monitoring. In addition, even for supplier-level work order dispatch to be effective, the physical spaces constituting supply line connection intersection must be instrumented with a density and distribution of required sensors.

The difficulty of adoption can be split into technical and functional concerns. Experts in the field of blockchain technology are predicting continuous routing trial and error processes of single-use applications that will lead to uncertainty among suppliers to invest in security measures for connection intersections.

Single-use applications are likely to be deployed initially. Over time, paradigm shifts of innovation will occur; a radical innovation, in the form of a single-use application or an extended version of a single-use application, will replace outdated applications. However, more operational capacity is required to implement the blockchain technology on a very large scale. Currently, suppliers want to participate in the blockchain due to the huge hype, but in some

cases, alternative and simpler technologies will be more feasible and appropriate.

The deployment of such sensors at scale is a nontrivial problem in its own right. We anticipate that any broadly effective solution to the supply line connection security problem will require a combination of approaches of which the blockchain will be one of many parts.

Most DoD rules established in the future must be designed to be utilised in determining how equipment upgrade/repair simulations can be depicted in sequence episodes. For example, routers in one spatial domain will never see another supply line connection logistics account flash. It doesn't need to have all the rules about these devices. We have designed Logistics Flow Chart sequence with steps to follow for accurate determination of Sourcing Ticket parameters influencing equipment Upgrade/Repair Simulation outcomes.

Our intention is to present the performance and behaviour of dispatchers engaged in the blockchain process modification with a view toward obtaining detailed pictures of the representative process of that occurs. While performance was an important part of tactic evaluation, our emphasis in this product demonstration report is mainly focused on examination of process behaviour during dispatch activity.

1. Many installations have not received the same route service reports at the same time under previous Blockchain programmes.
2. Automating some aspects of Blockchain collection and work order generation means more timely and operationally relevant reports
3. Enable Blockchain monitor of route service and evaluate fiscal constraints, internal dispatch communications and route service metrics and measures availability
4. Ensure Blockchain representation of route service design standards, and work order risk functions
5. Communication of objective goals and future Blockchain achievements required for meeting work order requirements meet equipment deployment challenges.
6. Convenience of route service when installation communications over Blockchain system are consistently available.
7. Availability of Blockchain capacity—at what installation is the route service agreement provided
8. Make sure Blockchain allows for different types/sizes of part components to gain access to multiple installation
8. Temporal availability of Blockchain system--when and at what cost is the route service agreement provided?

9. Information availability in Blockchain--does the installation know how to utilise the route service agreement for different types/sizes of part components?
10. Evaluate work order generation trends & assess the impact of Blockchain policy and other organisational changes
11. Ensure Blockchain architecture at multiple installations has required capacity to participate in the contract terms determination process.
12. Generate Blockchain stakeholder acceptance and linkage to installation-directed contract procurement tech base.
13. Design Blockchain system to provide clear, reliable & credible work order generation flexibility for determination of route service indices
14. Make Blockchain deliver realistic and timely route service agreement goals and targets & integration into dispatch signal decision-making.
15. Measures of Blockchain security--What are the perceptions involved in installation contacts,
16. Assess degree of potential Blockchain security risks to installations during transit?
17. Route service maintenance goals and objectives to be present in Blockchain system for different types/sizes of part components.
18. Identify dispatch programme constraints internal to Blockchain & select consensus performance measures
19. Test, implement and integrate Update/Review Blockchain report performance/monitor results into decision-making
20. Establish a schedule for regular performance reporting of Blockchain system
21. Consider how Blockchain system requirements determine monitor and reporting of supply line performance
22. Monitor Blockchain system performance at agreed upon intervals.
23. Establish results-based Blockchain system performance measure report format,
24. Design preferred Blockchain approach for supplier connection result integration
25. Consider the desired frequency of Blockchain system evaluation
26. Compare Blockchain performance results to the goals set for each measure

27. For measures not meeting Blockchain goals, identify action items for improving performance
28. For measures consistently exceeding Blockchain goals, consider increasing work order targets,
29. Provide Blockchain resources required to ensure work order decision is fiscally sound.
30. Mechanisms embedded in Blockchain must be in place for advance equipment deployment trips
31. Be aware when designing Blockchain systems that schedules for contract procurement quotes can change quickly,
32. Dispatching demand-responsive Blockchain services is more labor-intensive for work order generation than for fixed-route services.
33. Blockchain contact with installations and confirmation of equipment pick-ups requires dispatchers participation levels optimised to fixed-route service,
34. Demand-responsive supply scenarios via installation route service agreements requires more intensive Blockchain constraints than fixed-route service
35. Blockchain functions of route service provides the potential and requirements to assess system performance within scope function
36. Blockchain categories of performance measures, including their uses, typical supply line connection requirements & typical reporting intervals,
37. Different types/sizes of part components require unique Blockchain enabling conditions, performance measures & range of use guidelines
38. Potential Blockchain sources of supply line information for evaluating requirements for use of particular metrics and measures
39. Blockchain guidance on application of performance-based work order standards.
40. Number of measures to be reported by Blockchain—too many will overwhelm dispatchers, while too few may not present a complete picture
41. Amount of detail to be provided in Blockchain systems—general metrics/measures will be easier for dispatchers to calculate and present
42. More detailed metrics/measures will incorporate greater number of factors influencing operational outcomes of Blockchain,
43. Determine if kinds of comparisons to be made in Blockchain are evaluated only internally or

compared with other installations?

44. The intended audience— some dispatchers will be more familiar with Blockchain transit factors addressing trade-offs than others,

45. Blockchain models representing part deployment plans are used to forecast growth of installation investments in contract procurement terms

46. New or expanded dispatch capacity for executing Blockchain processes will affect work order generation patterns/demands on operational outcomes

47. Outputs from Blockchain model characteristics can be used to calculate metrics/measures for part type/size mobility,

48. Blockchain system facilitates parts type/size deployment trips result from surge-based contingency scenarios.

49. Blockchain accessibility to part component type/size delivery contracts established at multiple installations,

50. Blockchain should be designed to feature temporal modes of supply line connection service reservation periods for applicable intersections