

# Aragon Nest Proposal: Connect DAOs to centralized systems

## General use cases

	Use Case	App	Function/Details	Implementation
1	Be sure not to miss any vote or survey... with a Telegram notification	Voting/Survey	<pre>event StartVote (...)</pre> <pre>event StartSurvey (...)</pre>	Watch an Event then send a Telegram message with <code>voteId</code> and <code>_metadata</code> parameters.
2	Track votes/surveys outcomes in RT (and maybe build a dashboard?)	Voting	<pre>function initialize (...)</pre> <pre>event StartVote (...)</pre> <pre>function getVote (...)</pre> <p>A member of a DAO can verify when the <code>initialize</code> function initializes the vote app. By reading the <code>voteTime</code> parameter and passing this parameter via webhook to a centralized service, he can create an application that verifies the result of any vote at the end of the voting time only querying the getter function <code>getVote</code>.</p> <pre>function getSurvey (...)</pre> <p>gives you the data to build a real-time dashboard to measure sentiment around a given decision</p>	Watch a Contract + Web hook
3	Track remaining budgets in real-time		<pre>function</pre> <pre>_getRemainingBudget(_token)</pre>	Watch a Contract + Web hook / Send an email / Telegram

4	Get a notification when your vested tokens finally get unlocked	Token Manager	<p>function</p> <p><code>_spendableBalanceOf(_token)</code></p>	Watch a Contract + Telegram
5	Track votes' execution	Voting	<p>event <code>ExecuteVote (...)</code></p> <p>Monitor the execution of a specific vote by merely checking the <code>ExecuteVote</code> event.</p>	Watch an Event + Web hook/Telegram/Send an email
6	Check all incoming deposits of a DAO for tax compliance purposes	Finance	<p>Check <code>NewTransaction(...)</code> events with <code>_incoming</code> parameter set to true or use "Watch a Transaction" with <code>deposit(...)</code></p>	Watch an Event / Watch a transaction + An authenticated web hook storing the transfers in a centralized database
7	Get notified when you receive a payment from a DAO (and maybe track it for tax compliance purposes)	Finance	<p>event <code>NewTransaction(...)</code></p> <p>You can filter using the <code>_reference</code> parameter or the recipient address</p>	Watch an Event / + Telegram or Store to a Google Spreadsheet
8	Track your DAO's agent!	Agent	<p>event <code>Execute (...)</code></p> <p>Using an Agent a DAO can interact with any Ethereum contract using <code>_target</code> and <code>_data</code> parameters. Right now the <code>Execute</code> event allows anyone to read this data but not to decode it. With our tool if the contract called with the <code>_target</code> parameter has a public ABI, it will be possible to read,</p>	Watch an Event + Decoder + Webhook / mail or Telegram

			decode and create any filter/trigger based on the <code>_data</code> field, which includes all the details of the action the Agent is doing on Ethereum in behalf of the DAO.	
9	Monitor new vests and current vests' state	Token Manager	<pre>function getVesting (...)</pre> <pre>event NewVesting (...)</pre> <p>By checking the <code>NewVesting</code> event you get the <code>vestingId</code> generated by the function <code>assignedVested</code>. Using the <code>vestingId</code> parameter, it's possible to use the getter <code>getVesting</code> function to know data related to current vests</p>	Watch an Event to get <code>vestingId</code> + Watch a Contract trigger to get data about a vest
10	Track DAO's balances in realtime	Vault	<pre>function balance (...)</pre>	Watch a Contract + Webhook for monitoring or running a dashboard
11	Get notified on Telegram when your DAO give you more power/new privileges	ACL	<pre>event</pre> <pre>SetPermissionParams(...)</pre>	Watch an Event + Telegram

These are just a few examples... This table could have been never-ending: track payments, new budgets, new vests, immediate payments, recurring payments, track surveys' and votes' options, tokens' minting and burning, check if a survey is opened (Watch a Contract with `_isSurveyOpen`) or has reached the quorum (`isParticipationAchieved`).

## Fundraising use cases

Use cases based on the fundraising modules that Aragon Black [is building](#).

	Use Case	App	Function/Details	Implementation
12	Get a	Batched	<pre>function getStaticPricePPM(1)</pre>	Time trigger +

	timeseries of the prices during a batched-fundraising	bancor market maker		Watch a contract + A web hook storing the data on Mysql, on a Google Sheet, etc
13	Get info about the current batch in real-time	Batched bancor market maker	<pre>function getBatch(getCurrentBatchId())</pre> <p>Returns: batch.initialized, batch.cancelled, batch.supply, batch.balance, batch.reserveRatio, batch.totalBuySpend, batch.totalBuyReturn, batch.totalSellSpend, batch.totalSellReturn);</p>	Watch a contract (track any change) + A web hook
14	Get a timeseries of the price of a token during a token presale	Presale	<pre>function contributionToTokens(1)</pre>	Time trigger + Watch a contract + A web hook storing the data on Mysql, on a Google Sheet, etc
15	Get notified for every contribution via Telegram	Presale	<pre>event Contribute (...)</pre>	Watch an Event + Telegram
16	Get a token's total supply variation in real time via Telegram	Token Manager	<pre>token.TotalSupply()</pre>	Watch a contract (track any change) + Telegram

These are just a few examples... Others: get notified for every new batch, beneficiary update, track any collateral token variations, build a BOT actived by any new/claimed/canceled order.

## Notify Aragon communities

Another nice improvement we'd like to build? We want to enable smart contract developers to contact/notify all the members of a DAO via Telegram, email or iOS/Android push notification with one line of solidity code.

How it works:

- Our tool offers an opt-in tool to verify connections between an Ethereum address and an email or a Telegram account.
- To verify those connections the DAO member needs to sign a transaction via Metamask. As soon as our tool sees the transactions, it considers the connection verified
- Whenever a DAO want to notify all his members via a push notification, for example, the smart contract developer can simply write: `emit Notifier("AllUsers", "PushN", Message)`. It would also be possible to use already existing events, without the need to edit current smart contracts.
- Our tool filters, among the participants of that specific DAO (= any token holder of that DAO), the users who opt-in, and send the message