



## Product Feature Matrix

Below is a breakdown of the features that are available in version 1.0 of the Pulse-App software package. Some features are only available in particular editions i.e. PulseSolo or PulseCloud and their availability is indicated by a ✓ or a ✗. Unless specifically stated, all features are available on trial editions of Pulse-App.

You should consult the footnotes at the bottom of each section for additional details.

Features	PulseSolo	PulseCloud
<b>PulseApp</b>		
<b>1. Free iOS and Android App, with zero in-app advertising.</b> A true native App provides unparalleled performance when compared to web-based alternatives.	✓	✓
<b>2. Unlimited number of Notifications at zero cost per Notice.</b> Once purchased and licensed, your organisation can send an unlimited number of Notifications free of charge – there is no <i>per-notice</i> cost.	✓	✓
<b>3. Minimal set-up and configuration to get users logged on quickly and easily.</b> Since PulseApp communicates directly to with an organisation’s server(s), ensuring a greater degree of data protection, it is necessary that the App is configured to connect to the organisation. To avoid unnecessary set-up and configuration, each organisation is issued with a unique 5-digit Org ID which users can enter in order to quickly and easily look up an organisations connection details.	✓	✓
<b>4. Ability to customise the App to meet your organisations branding.</b> The Pulse Central desktop application allows you to customise the App to match your organisations branding. When users logon and connect, this customisation information is downloaded and applied. If you wish to update this information or run particular campaign, you can update the branding quickly and easily and these updates will be applied the next time the user checks for Notices.	✓	✓
<b>5. Ability to publish useful links, including phone numbers, emails addresses, geo-location information and websites.</b> Like the branding features, Pulse Central also allows you to publish a variety of useful links that your organisation may want users to have access to. These links are downloaded and applied each time a user checks for new Notices. All links are active and can be used directly from the App.	✓	✓
<b>6. Ability to send feature-rich Notices with a variety of different content.</b> Pulse Central allows teachers and staff to publish Notices with a variety of different content including core category, title, message, thumbnail image, event date & time, additional URL links and automated reminders.	✓	✓
<b>7. Notification Categories reduce information overload.</b> When Notices are published, they are flagged as belonging to a particular category (homework, exam reminders, lesson changes etc). When these Notices are downloaded, they are automatically placed in the relevant category allowing the user to quickly and easily see important information.	✓	✓
<b>8. Users may set reminders to alert them of important events.</b> In addition to staff setting Notice reminders, users can also set their own reminders quickly and easily to ensure they are alerted when important events are pending.	✓	✓
<b>9. Automatic reward points to promote user engagement.</b> Each time a user checks for Notices, within a given period, they are allocated a reward point. This is a useful technique to promote general use and engagement and can support other reward schemes that organisations may run	✓	✓

<p><b>10. Record individual timetables.</b> Students are constantly losing their timetables and often use this as an excuse for being late. PulseApp allows students to take a picture of their timetable and display it in a dedicated area for easy viewing.</p>	✓	✓
<p><b>11. Engage with Parents automatically.</b> Parents and carers can also use PulseApp (free of charge). When teachers publish Notices, they can seamlessly send them to parents as well. This helps engage with parents &amp; carers but also keeps them continually informed of their child's progress.</p>	✓	✓
<p><b>12. Multiple Accounts, one App.</b> In situations where more than one organisation has adopted Pulse-App software, and where parents may have a child at each organisation, their PulseApp can support multiple accounts for that parents can continue to be informed about each child's progress.</p>	✓	✓
<p><b>13. Pulse Managed User Accounts.</b> As with all aspects of Pulse-App, the system can be configured to use Pulse managed accounts, thus minimising interaction with existing IT systems.</p>	✓	✓
<p><b>14. Allow LDAP authentication.</b> As an alternative to Pulse managed accounts, organisations can also configure, <i>individually</i>, accounts to authenticate against LDAP. This allows organisations to make use of their existing Windows® accounts and means that users do not need to remember another set of passwords.</p>	✓	✗
<b>Pulse Central</b>		
<p><b>1. Fully functional Desktop application that can be installed on any number of computers, regardless of site license.</b> Pulse Central is a native, Windows desktop application that makes use of industry standard, <i>briefcase-model</i>, data communications. This provides a feature rich, responsive user interface avoiding <i>clunky and sometimes insecure</i> web-based solutions.</p>	✓	✓
<p><b>2. Single Desktop application that provides access for Administrators, Managers and Staff.</b> Pulse Central provides a single point of access for Administrators, Managers, Teachers and Support staff. Five easy, simple user levels can be applied to accounts based on a hierarchy of permissions.</p>	✓	✓
<p><b>3. Intuitive User Interface.</b> Pulse Central presents a modern, intuitive user-interface that users of Microsoft® Office™ will feel comfortable with and confident using. The interface provides all of the standard features that users have come to expect including: context-sensitive help, accessibility options, multiple navigation options, export / save as features, print / preview options and comprehensive filtering and search features.</p>	✓	✓
<p><b>4. Publish a variety of different, feature-rich Notifications.</b> Teachers and Staff can quickly and easily publish engaging Notices to individual students or groups of students. Staff can pick which features that wish to make use of depending on the nature and purpose of the Notice. Notices can be sent to individual students or parents, groups of students or any combination of both. Teachers can quickly and easily flag of they want a Notice to be rebroadcasted to a student's parent / carer<sup>1</sup>.</p>	✓	✓
<p><b>5. Set Reminders automatically, to alert students and parents of important events.</b> In addition to the core Notice features, Teachers can also set Reminders automatically. Whilst students and parents can set Reminders when they receive a Notice, they may forget or overlook it. Automatic Reminders allow Teachers to define when they want a user to be reminded about a key event.</p>	✓	✓
<p><b>6. Send Notices with additional Push-Notifications.</b> When Notices are being created, the author can control how they wish them to be published. Additional Push Notifications allow a generic<sup>2</sup> prompt to be sent immediately<sup>3</sup> to the recipient. This ensures that the recipient knows straightaway that they have a Notice pending. When they click on these prompts, all pending Notices will be automatically downloaded.</p>	✓	✓
<p><b>7. Set Notices to be published in the future.</b> In addition to Push-Notifications, Notices can set to be published in the future i.e. not immediately. This is a useful if you want to create Notices about future events well in advance of them i.e. exam reminders, or scheme of work homework dates.</p>	✓	✓

<p><b>8. Allow staff to assess engagement.</b> Pulse Central allows teachers to quickly review Notices that they have sent providing a summative overview of how many students have downloaded each Notice. Staff can then drill deeper and identify, student by student who has read each Notice. This provides a real overview of engagement. Previous Notices can also be cloned to save having to re-write Notices that are frequently sent.</p>	✓	✓
<p><b>9. Create Groups of Users to simplify publishing Notices</b> Pulse Central's Notice publication is based around the notation of Groups. Groups can be thought of as <i>distribution lists</i> but they are in fact much more. Groups can be set up to represent a class, study groups, sports clubs, departments or even year groups. Users are added to groups, Staff are assigned as publisher of Groups and Notices are sent to groups.</p>	✓	✓
<p><b>10. Align Groups with Academic Years.</b> Pulse-App has been designed to fit in with the organisational models that schools and colleges use. In following with this, Groups are aligned with Academic Years. Pulse Central then auto-detects the current Academic Year and only displays the information, to the user, that is applicable to that year.</p>	✓	✓
<p><b>11. Comprehensive System Event Logging.</b> All aspects of the Pulse-App software system are logged, centrally, in a comprehensive hierarchal event log. Event logging is structured based on the core components that are being interacted with and includes 4 distinct event origins, 19 event sources and 19 event actions. In addition, each event log includes the user account that initiated the event, the date and time that it occurred, and overall status indication, none technical descriptions and the IP address from where the user was connected. This level of detail, combines with easy to use filters allow complete, comprehensive logging providing organisations with the assurance that everything is traceable.</p>	✓	✓
<p><b>12. Dedicated Notice Logging.</b> Whilst the System Event Log records everything that happens on Pulse-App, it is often useful to be able to examine just the Notices that have been sent. The Notice Even Log provides a quick summary of all Notices that have been sent during a given period. Comprehensive filtering allows this data to be analysed quickly and efficiently.</p>	✓	✓
<p><b>13. Simple to use Data Metric's to allow complete assessment of engagement.</b> Pulse Central comes complete with 7 summary Data Metrics reports<sup>4</sup>. These reports allow managers to assess the level of use and engagement, of Pulse-App, by students, parents/carers and staff. Each report provides a variety of different views to assess Notices sent, Notices read and Notices sent vs. Notices read. These views can be presented by year, month, week, day or hour and are shown in real-time. Few other communication systems provide this level of scrutiny. All reports include visual graphs and tabulated data and can be saved and exported in a variety of different forms.</p>	✓	✓
<p><b>14. Fast and Effective Data Import Wizard.</b> A simple to use Import Wizard provides organisations with all the tools necessary to migrate data directly into the Pulse-App software. The wizard provides comprehensive instructions and spread sheet templates that allow organisations to export data from their existing MIS's and then import straight into Pulse-App. The wizard supports importing users, groups, group publishers, and student-parent relationships.</p>	✓	✓
<p><b>15. Pulse Managed User accounts.</b> As with authentication on the app, user accounts can be configured, on an individual basis, to be Pulse managed accounts. These accounts are controlled and maintained by Pulse-App and authentication is carried out via your username and password.</p>	✓	✓
<p><b>16. Allow LDAP authentication.</b> Pulse Central can also be configured to authenticate uses via LDAP. This authentication occurs automatically so staff and teachers will be automatically logged on without having to provide a username or password.</p>	✓	x

<sup>1</sup> Pulse User accounts allow configuration to reflect student's decisions not to contact their parent / carer. This option is respected and enforced when Notices are re-broadcasted to parent / carers.

<sup>2</sup> Push Notifications are sent via 3<sup>rd</sup>-parties and Apple / Google services. Whilst this communication is protected via HTTPS / SSL, it is the only part of the communication chain that is not controlled and secured by Pulse-App. For this reason, and to maintain Data Protection compliance, only generic, not specific messages are sent. We do however have end-to-end encryption for added security.

<sup>3</sup> The immediateness of Push Notifications is dependent on the user having a suitable data connection either cellular or wi-fi.

<sup>4</sup> Data Matric reports require an IIS installation on the server machine.

## Back-End Services

<p><b>1. Dedicated in-house, back-end services.</b> Pulse-App is driven by 3 dedicated services that provide a multi-tier framework isolating connections from external users (connect via PulseApp), internal users (via Pulse Central) and Data Metric reporting. Depending on the selected product, these services can be housed on an organisation's internal servers.</p>	✓	✗
<p><b>2. Secure, encrypted data communications.</b> Data communication, between Pulse Central and Pulse Data server, and PulseApp and Pulse Mobile server is protected using industry standard, rolling symmetrical (PC1) and asymmetrical (RSA) encryption.</p>	✓	✓
<p><b>3. Notification Automation through API's.</b> To reduce the workload for staff, routine, day-to-day Notices can be generated automatically in response to daily actions within existing MIS's. Pulse-App is driven by its MS SQL database. Through the use of database API's (<i>Stored Procedures</i>) current databases systems, which drive your existing MIS, can be configured to trigger and insert Notices automatically. Once generated, these Notices are published as if manually written by a member of staff.</p>	<i>pending</i>	✗
<p><b>4. MIS Integration.</b> In a similar fashion to Notice Automation, data within existing MIS's can be synchronised with Pulse-App ensuring that user accounts, groups and student-parent relationships are always up to date and accurate. This feature is currently in development.</p>	<i>pending</i>	✗
<p><b>5. Complete control over back-end Databases.</b> Pulse-App is driven by a comprehensive MS SQL database that has been designed to accurately reflect the business-logic of academic institutes. Depending on the selected product, this Database can be housed, managed and backed up, without the boundaries of an organisations IT infrastructure.</p>	✓	✗
<p><b>6. Responsibility for maintaining and updating systems.</b> With PulseSolo, the organisation is responsible for maintaining and updating the software systems that make the Pulse-App software package. It is your responsibility to ensure continuity of service, apply updates when released and back-up database information. Whilst this is additional work for organisations, it does provide an additional level of confidence regarding data protection. With PulseCloud, Pulse Technologies assume responsibility<sup>5</sup> for software updates which can be applied automatically by our technical support team.</p>	✓	✗
<p><b>7. Automatic Licensing updates.</b> Pulse-App has been designed to check for license updates daily. This means that an organisation can scale up (or down) their license commitments with minimal hassle or downtime. You inform us, we process your request, we inform your software<sup>6</sup>.</p>	✓	✓

<sup>5</sup> Our responsibility extends as far as applying updates. The Microsoft® Azure™ server package, that we initially configure on your behalf, is the responsibility of the individual organisation<sup>5</sup> both in terms of applying Windows® updates, configuring security features and firewall, and ensuring data is backed up<sup>6</sup>. Continuity of service lies with the service provider.

<sup>6</sup> For the duration of the licensed period. Once expired, Pulse Technologies will terminate the agreement with Microsoft and thus remove the server.

<sup>7</sup> This is not an exhaustive list of responsibilities.

## Data Protection Considerations

<p><b>1. Data Protection obligations.</b> Pulse-App has been designed, from the <i>grass roots</i>, with Data Protection in mind. Depending on the selected edition, the duty of responsibility for Data Protection may lie entirely with the Organisation (PulseSolo) or be shared between Pulse technologies and a given organisations.</p>	✓	✓
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**2. ICO DfE Compliant.**

Pulse-App has been registered with the Department for Education and the Information Commissioner's Office, who has, in effect, confirmed that it abides by their policies regarding 3<sup>rd</sup>-party provisions for software solutions.

