

How to allow customers to send mass emails effectively

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Session Agenda

- Email messaging: the use case
- The “simple” way
- Problems with the “simple” way
- Implementation approaches
- The Fidelius ISV approach
- Implementation steps with Fidelius ISV – for email
- Implementation steps for other channels

Presenter Profile



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Recent Projects

- From 2021 – CTS Eventim: Scrum consulting and coaching, Agile Project Management, Symphony Product Owner
- From 2021 – Fidelius: cloud solution for messaging (WhatsApp, SMS, emails, ...) from PB applications and REST Client
- From 2018 – tens of PowerBuilder consulting missions for PB version upgrade, architecture and UI modernization, Scrum
- From 2018 – PB Open
- From 2004 – Enable Multilingual

Key Skills

- PowerBuilder
- C#
- DBMS
- API
- Scrum, Agility, SDLC
- Project Management
- PB Modernization

Company Profile



Enable Development

- Enable Development, Appeon Consulting Partner, helps companies to enhance the productivity and the quality of their development, by providing consulting, training, mentoring and software development services – including managed out-staffing.
- With more than one hundred and fifty customers all over the world, Enable Development organizes a network of consultants (freelancers and employees) and provides development services on projects it manages directly, backed by a team of about 500 developers with all technologies, including PB.
- The company specializes in: PowerBuilder, C#, DBMS, API, PB Modernization, Scrum and Agility, development tools, localization, Agile project management, strategic IT consulting, PowerBuilder-centered migration to C# (PB Open).

Email messaging: the use case

- Sending emails is one of the most common use cases for data-centric applications, where PowerBuilder is undisputed king
- Our applications usually send:
 - Transactional emails – linked to a specific event or process
 - Mass emails – linked to a marketing campaign
- Emails are in different languages (for different customers), most of the times in HTML format, sometimes with attachments (in different languages)
- Emails often contain links to resources (images), and action links/buttons for specific actions

The “simple” way

- Sending emails? It's so simple!
- We just need an SMTP server and an SMTP client object!
- Every customer has an email address, so we could use their SMTP server, and configure the details in the application



Problems with the “simple” way

- Well, the world changed since a while ago...
- SMTP Server Management
- Sender with certification, DKIM, SPF, DMARC
- Spam, reputation, IP management
- Server availability
- Hard to get a feedback (delivered, read, bounced), and un-subscription
- Action links require specific solutions
- and... it's slow!!!

Implementation approaches

1. Historical approach: Customers manage their own servers
2. Historical approach with service: we manage the customers' SMTP servers
3. Centralized solution
4. Use a cloud provider

Implementation approaches

Historical approach: Customer manages their own server

- do they have advanced technical knowledge?
- where do the action links point?
- how to get the feedback and manage un-subscription?
- it is slow

Implementation approaches

Historical approach with service: we manage the customer's SMTP server

- can we get the security clearance?
- where do the action links point?
- how to get the feedback and manage un-subscription?
- it is slow

Implementation approaches

Centralized solution

- We have one or more SMTP servers
- This includes spam management and reputation, IP management
- A big problem is also the sender certification, and allowing customers to use their own address
- the action links could point to a high-available service, in the infrastructure
- the service also needs to be ready for the webhooks to manage feedback and un-subscription
- and ... it's slow!!!

Implementation approaches

Use a cloud provider

- Several cloud providers allow ISVs to send emails, in a modern and efficient way
- All we need is an integration, API Keys management, sender certification, account billing and so on
- A highly-available service needs to be setup in our infrastructure for processing the action links
- the service also needs to be ready for the webhooks to manage feedback and un-subscription
- So, we can have one provider for emails, several for SMS (geographically organized), one for WhatsApp and so on
- Basically, dedicating development and operations resources to a non-core business

The Fidelius ISV approach

- Fidelius ISV is a fully managed, multi-modal, unified REST API for messaging (SMS, WhatsApp, Email)
- It features a simplified and easy to use API (plus a PowerBuilder class) to send SMS, WhatsApp, transactional emails, mass emails
- It's independent from the implementation of the providers it uses, and isolates developers from providers' breaking API changes
- Totally white-labeled, allows flexible management of commercial policies (i.e.: reselling to customers)
- No infrastructure needed for our applications – it's either pooled or private infrastructure – and it is fully managed
- Gives the feedback for delivered, read, bounced messages
- Allows action links that can be used easily by the application
- Fast! 10,000 emails can be sent in less than a minute

Implementation steps with Fidelius ISV – for email

- get an account as a partner and load it with credits
- onboard each sender, and freely allocate credits
- a few lines of code in the application:
 - service initialization
 - sending a message
 - sending mass messages
 - getting message statuses and link actions

Implementation steps for other channels

- Sending a message via Email, SMS, WhatsApp is very similar – just specify the channel and the needed parameters
- Getting the status is exactly the same as for emails (it's based on the message ID, regardless of the channel used)
- WhatsApp also supports chatting, that can be implemented in the application or in a Web Page / Mobile application
- Messages can include a link that points to InfoPages: powerful HTML pages that allow the recipients to interact with the message

Code snippets

Service initialization

```
n_fidelius = CREATE n_fidelius  
.SetServer("https://api.fidelius.online/api/v1")  
.SetAPIKeys(<partnerAPIKey>,<customerAPIKey>)
```

Sending a message

```
.PostMessage(<channel>,<text>,<recipient>,...)  
.GetMessage(...)  
.GetModifiedMessages(...)
```

Sending transactional or mass emails

```
.PostEmailMessage(...,<subject>,<content>,...,<ds>...)  
.GetEmailMessageStatus(...)  
.GetEmailRecipients(...)
```

Code snippets

Sending a message (SMS/WhatsApp)

```
.PostMessage(ls_channel, ls_text, ls_recipient,  
lb_includelink, ls_infopagetext, ldt_programmed, ref  
l11_msgid, ref ls_error)
```

```
.GetMessage(l11_msgid, ref ls_json)
```

```
.GetModifiedMessages(ldt_last, ref ls_json)
```

WhatsApp Chat

```
.GetChatMessages(ls_channel, l11_lastid, ls_recipient,  
ls_json, ref lds_chat)
```

```
.GetChatRecipients(lds_chat, ref lds_recipients)
```

```
.PostChatMessage(ls_channel, as_text, as_recipient, ref  
l11_msgid, ref ls_error)
```

Code snippets

Sending a message with InfoPages

```
.PostMessage(ls_channel, ls_text, ls_recipient,  
lb_includelink, ls_infopagetext, ldt_programmed, ref  
l11_msgid, ref ls_error)  
  
.GetMessage(l11_msgid, ref ls_json)
```

InfoPages endpoints

```
GET /InfoPage/MessageDetails/{messagecode}  
GET /InfoPage/Customer/{messagecode}  
POST /InfoPage/Confirm?  
      messagecode=<msgcode>&  
      confirmationstatus=<action>
```

Fidelius Control Panel

Send Email

From

Replace new line with
 ☐ Is Dynamic Text ☒

To

Cc

Bcc

Subject

Text

Programmed d/t

Send Separately ☒

Edit To Recipients

EMAIL_ADDRESS	FNAME	LNAME
<input type="text" value="gianluca.debonis@enable-dev.com"/>	Gian Luca	De Bonis
<input type="text" value="oleksandr.savostianov@enable-dev.com"/>	Sasha	Savostianov
<input type="text" value="massi.debonis@enable-dev.com"/>	Massimiliano	De Bonis

<

Remove All

Number of recipient(s): 3

Import from Clipboard

Export to Clipboard

OK

Cancel

Thank you

Q&A Time

